THE OFFICE OF REGULATORY STAFF

DIRECT TESTIMONY AND EXHIBITS

OF

DANIEL F. SULLIVAN

DECEMBER 3, 2013

DOCKET NO. 2013-275-WS

Application of Carolina Water Service, Incorporated for Adjustment of Rates and Charges, and Modification of Certain Terms and Conditions for the Provision of Water and Sewer Service

DIRECT TESTIMONY OF DANIEL F. SULLIVAN

FOR

THE OFFICE OF REGULATORY STAFF

DOCKET NO: 2013-275-WS

IN RE: APPLICATION OF CAROLINA WATER SERVICE, INCORPORATED FOR ADJUSTMENT OF RATES AND CHARGES, AND MODIFICATION OF CERTAIN TERMS AND CONDITIONS FOR THE PROVISION OF WATER AND SEWER SERVICE

Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND OCCUPATION.

A. My name is Daniel F. Sullivan. My business address is 1401 Main Street, Suite 900, Columbia, South Carolina, 29201. I am employed by the South Carolina Office of Regulatory Staff ("ORS") as an Audit Manager.

Q. PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.

A. I received a B.S. Degree in Business Administration with a major in Accounting from the University of South Carolina in December 1998. From February 1999 to February 2005, I was employed as an auditor with the South Carolina State Auditor's Office. In that capacity, I performed audits and reviews of cost reports filed by institutional providers of Medicaid services for the South Carolina Department of Health and Human Services. The primary purpose of those audits and reviews was to establish the applicable reimbursement rates to be paid to Medicaid providers for services rendered to qualified Medicaid patients. In February 2005, I began my employment with ORS and since then have been involved in cases dealing with the regulation of nuclear waste, gas, electric, water and wastewater companies. On June 1, 2012, I was promoted to Audit Manager of Gas Utilities and Chem-Nuclear audits.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?

A. The purpose of my testimony is to set forth my findings and recommendations resulting from ORS's examination of the application of Carolina Water Service, Inc. ("CWS" or "Company") in this docket. The application was filed on September 4, 2013.

Q. PLEASE DESCRIBE THE PROCEDURES USED TO PERFORM THE EXAMINATION OF THE COMPANY'S APPLICATION.

A. ORS's examination of the Company's application consisted of three major steps. In step one, ORS verified that the operating experience and rate base, reported by CWS in its application, were supported by the Company's accounting books and records for the test year. In the second step, ORS tested the underlying transactions in the books and records for the same period to ensure that the transactions were adequately supported, had a stated business purpose, were allowable for ratemaking purposes, and were properly recorded. Lastly, our examination consisted of adjusting, as necessary, the revenues, expenditures, and capital investments to normalize the Company's operating experience and rate base in accordance with generally accepted regulatory principles and previous Commission orders.

Q. PLEASE IDENTIFY THE EXHIBITS ATTACHED TO YOUR TESTIMONY.

A. I have attached the following exhibits to my testimony relating to the Company's Application:

- Audit Exhibit DFS-1: Operating Experience, Rate Base, and Rates of Return for Combined Operations
- Audit Exhibit DFS-2: Operating Experience, Rate Base, and Rates of Return for Water Operations
- Audit Exhibit DFS-3: Operating Experience, Rate Base, and Rates of Return for Sewer Operations
- Audit Exhibit DFS-4: Explanation of Accounting and Pro Forma Adjustments
- Audit Exhibit DFS-5: Depreciation and Amortization Expense Adjustments
- Audit Exhibit DFS-6: Computation of Income Taxes
- Audit Exhibit DFS-7: Cash Working Capital Allowance
- Audit Exhibit DFS-8: Return on Equity

These exhibits were either prepared by me or were prepared under my direction and supervision in compliance with recognized accounting and regulatory procedures for water and wastewater utility rate cases. These exhibits show various aspects of the Company's operations and financial position.

Q. PLEASE DESCRIBE THE FORMAT OF AUDIT EXHIBIT DFS-1 AND ELABORATE ON THE CALCULATIONS.

A. Audit Exhibit DFS-1 details the Company's operating experience, rate base, and rates of return for water and sewer operations for the test year ended December 31, 2012. The exhibit's format is designed to reflect the Application per books and ORS's proposed accounting and pro forma adjustments to normalize the results of the Company's test year operations.

Column (1) details the Application per books provided by CWS for the test year ended December 31, 2012.

Column (2) details ORS's proposed accounting and pro forma adjustments designed to normalize the Application per books. An explanation of each adjustment is contained in Audit Exhibit DFS-4.

Column (3) details ORS's results for a normalized test year for CWS by adding columns (1) and (2). After the accounting and pro forma adjustments, Net Income for Return of $1,026,231 was computed using Total Operating Revenues of $8,463,388, less Total Operating Expenses of $7,444,281, plus customer growth of $7,124. Total Rate Base of $23,610,433 produced a Return on Rate Base of 4.35%. As shown on Audit Exhibit DFS-8, the resulting Return on Equity was 1.88%.

Column (4) details the Company's proposed increase recalculated by ORS and the calculation of taxes and customer growth associated with the proposed increase. An explanation of each adjustment is contained in Audit Exhibit DFS-4.

Column (5) details the effect of the Company's proposed rate increase by adding columns (3) and (4). Net Income for Return of $2,371,962 was computed using Total Operating Revenues of $10,648,175, less Total Operating Expenses of $8,292,955, plus customer growth of $16,742. Total Rate Base of $23,610,433 produced a Return on Rate Base of 10.05%. As shown on Audit Exhibit DFS-8, the resulting Return on Equity was 13.87%.

Q. PLEASE EXPLAIN THE ADJUSTMENTS IN AUDIT EXHIBIT DFS-4.

A. For comparative purposes, ORS and the Company's adjustments are both presented in Audit Exhibit DFS-4.

Adjustment 1 – The ORS Water and Wastewater Department proposes to annualize water and sewer service revenues for the test year. Details of the adjustments totaling $28,840 are discussed in the direct testimony of ORS Water and Wastewater witness, Willie Morgan.

Adjustment 2 – The ORS Water and Wastewater Department proposes to adjust miscellaneous revenues for the test year. Details of the adjustment for ($11,054) are discussed in the direct testimony of ORS Water and Wastewater witness, Willie Morgan.

Adjustment 3 – ORS proposes to adjust uncollectible accounts associated with the Company's revenues after ORS's proposed accounting and pro forma adjustments. The adjustment of ($116) was provided by ORS Water and Wastewater witness, Willie Morgan.

Adjustment 4 – ORS proposes to adjust operators' salaries by annualizing the latest available salary information as of May 2013. Each operator's total salary is allocated to CWS based on its percentage of Equivalent Residential Connections ("ERC"). The ERC percentage is calculated by dividing the number of ERCs served by CWS by the total number of ERCs served by all subsidiaries to which the employee is assigned. ORS computed annualized salaries of $920,613, less per book salaries of $1,210,999, for an adjustment of ($290,386).

Adjustment 5 – The Company proposes to adjust purchased power by ($63) in direct correlation with annualized revenues. ORS does not propose an adjustment as future purchased power costs are not known and measurable.

Adjustment 6 – ORS proposes to remove ($1,784) from purchased power associated with Indian Pines wells that are no longer used and useful. The Indian Pines subdivision has interconnected with the City of West Columbia for water service. As such, ORS has made adjustments to other categories of costs related to Indian Pines. See adjustment numbers 8, 12, 16 and 32 for adjustments to expenses associated with Indian Pines. Removal of the wells from plant-in-service is also reflected in the calculation of adjustments 29, 37 and 40.

Adjustment 7 – ORS proposes to remove from maintenance and repair expense non-allowable expenses of ($33,251). Expenses were deemed non-allowable for various reasons including, but not limited to, no invoice or other supporting documentation provided and/or expenses were related to other Utilities Inc. subsidiaries. ORS has proposed similar non-allowable adjustments to other categories of costs in the filing. See adjustment numbers 11, 13, 15, 21, 24, 25 and 28.

Adjustment 9 –ORS proposes to increase maintenance and repair expenses by $846,864, to reclassify expenditures incorrectly classified as additions to plant in service. Details of the adjustment are discussed in the direct testimony of ORS Water and Wastewater witness, Dawn Hipp.

Adjustment 10 – ORS proposes to reclassify maintenance and repair expenditures of ($1,200) which should have been capitalized.

Adjustment 14 – The Company proposes to adjust chemicals by $907 in direct correlation with annualized revenues. ORS does not propose an adjustment as future chemical costs are not known and measurable.

Adjustment 17 – ORS proposes to adjust for allocated transportation expenses, including fuel and auto repairs. Transportation expense per vehicle is calculated by taking the total transportation expense for Utilities, Inc. and dividing it by the number of vehicles in the Utilities, Inc. fleet. The total transportation expense per vehicle of $5,893 is then allocated to CWS based on the employee that operates the vehicle and the time they spend working for CWS. ORS computed total transportation expense of $166,993 for CWS, less the per book amount of $212,133 for an adjustment ($45,140).

Adjustment 18 – ORS proposes to adjust operating expense charged to plant for time spent on capital projects and rate cases. Capitalized time reflects operators' and office employees' salaries, taxes & benefits. ORS made the adjustment using the capitalized time report for the most recent period of September 1, 2012 through August 31, 2013. ORS calculated operating expenses charged to plant of ($183,244), less per book amount of ($374,530), for an adjustment of $191,286.

Adjustment 19 – ORS proposes to adjust office salaries by annualizing salaries as of May 2013. Each office employee's total salary was allocated to CWS based on its percentage of ERCs. ORS computed annualized salaries of $586,026, less per book salaries of $550,518, for an adjustment of $35,508.

Adjustment 20 – ORS and the Company propose to remove DHEC fines of ($31,009) from office supplies and other office expense.

Adjustment 22 – ORS proposes an adjustment to rate case expenses of $77,869. This adjustment consists of two (2) parts. In part one (1), ORS reviewed prior rate case expenses of $718,656 from Docket No. 2011-47-WS related to the rate case, reconsideration, appeal, and remand. These expenses included legal fees, capitalized time, consulting fees, travel and other. ORS removed undocumented expenses, estimates and capitalized time. In part two (2), ORS verified expenses of $55,187 for current rate case expenses as of 11/5/2013. These charges included legal fees, capitalized time, administrative expenses and consulting fees. ORS proposes to amortize current and previous expenses over 3 years. The total proposed ORS adjustment of $77,869 is computed using unamortized rate case expenses associated with Docket No. 2011-47-WS of $311,425 and current expenses of $55,187 divided by 3 years, less the per book amount of $44,335.

Adjustment 23 – ORS proposes to annualize pension and other benefits associated with the salary adjustment for operators and office employees. ORS removed non-allowable benefits including, but not limited to, parties and employee awards that were included in the per book amounts. Total ORS computed pension and other benefits was $312,167, less the per book amount of $342,290, resulting in an adjustment of ($30,123).

Adjustment 26 – ORS proposes to reclassify outside services expenditures of ($46,361) which should have been capitalized

Adjustment 27 – Based on the recommendations of the ORS Water and Wastewater Department, ORS did not include the Company's adjustment for their proposed Leak Mitigation Program. Further explanation of ORS's position regarding the Company's proposed program is provided in the direct testimony of ORS Water and Wastewater witness, Willie Morgan.

Adjustment 29 – ORS proposes to annualize depreciation expense and adjust for net plant additions, vehicles, computers, capital improvements, non-allowable plant, capitalized time, and retirements. The details of the depreciation expense adjustment are shown in Audit Exhibit DFS-5. The depreciation rates were recommended by ORS Water and Wastewater witness, Willie Morgan. ORS's total depreciation expense amounted to $1,052,252, less the per book amount of $1,184,528, for a total adjustment of ($132,276).

Adjustment 30 – ORS proposes to adjust the amortization of Contributions in Aid of Construction ("CIAC"). The details of the amortization of CIAC adjustment are shown in Audit Exhibit DFS-5. ORS's total CIAC amortization expense amounted to ($342,357), less the per book amount of ($340,881), for a total adjustment of ($1,476). See Audit Exhibit DFS-5.

Adjustment 31 – ORS proposes to adjust payroll taxes associated with the adjusted test year salaries. The payroll taxes include Social Security, Medicare and unemployment taxes. ORS updated taxes using current rates. ORS computed taxes of $130,393, less the per book amount of $134,833, resulting in an adjustment of ($4,440).

Adjustment 33 – ORS proposes to adjust gross receipts and utility/commission taxes after accounting and pro forma adjustments. A total factor of .00963081, comprised of the SC Department of Revenue factor of .003 and the PSC/ORS factor of .00663081, was used to compute this adjustment. ORS proposes to increase gross receipts taxes by $25,925.

Adjustment 34 – ORS proposes to adjust income taxes after accounting and pro forma adjustments. ORS used a 5% rate for state income taxes and a rate of 35% for federal income taxes. Details of the computation of income taxes are shown in DFS-6.

Adjustment 35 – ORS proposes to eliminate the interest during construction of $12,165 from the per book amount for ratemaking purposes.

Adjustment 36 – ORS proposes to adjust customer growth after the accounting and pro forma adjustments. The growth factors of 0.81667% for water operations and 0.67547% were provided by ORS witness Willie Morgan.

Adjustment 37 – ORS proposes to decrease gross plant in service by ($3,869,198) for adjusted vehicle costs, computer costs, capital improvements, non-allowable plant, capitalized time, and retirements through December 31, 2012. This reduction results from adjusting the useful lives and allocation of various vehicles, the removal of items improperly capitalized in years prior to the test year, and those determined by the ORS Water/Wastewater Department as either relating to other affiliated companies, or having been improperly capitalized during the test year. ORS also recomputed capitalized time, and updated retirements, accordingly. Several adjustments from Docket No. 2011-47-WS were included by

ORS in the calculation of net plant additions. These adjustments were approved by Commission Orders but were not posted by CWS to their books and records.

Adjustment 38 – ORS proposes to include gross plant in service for general ledger additions of $1,604,813 as of November 5, 2013. ORS reviewed the support documentation for the proposed plant additions, and included only those plant additions that were known and measurable, and providing service to present customers.

Adjustment 39 – ORS proposes to remove excess book value of ($1,937,905) as approved in previous rate cases. ORS also proposes to remove the accumulated amortization of excess book value of $1,289,156 in Adjustment 41. Net excess book value of ($648,749) is removed from plant in service and is not included in the ORS calculation of depreciation expense or return on rate base. CWS removed net excess book value of ($718,143) as shown in Adjustment 39.

Adjustment 40 – ORS proposes to adjust accumulated depreciation by $542,702 to reflect gross plant in service and depreciation associated with pro forma general ledger additions, vehicles, computers, capital improvements, non-allowable plant, capitalized time, and retirements.

Adjustment 42 – ORS proposes to adjust cash working capital after accounting and pro forma adjustments. ORS proposes to increase cash working capital by $74,548. Details of this adjustment are included in Audit Exhibit DFS-7.

Adjustment 43 – ORS proposes to adjust CIAC by $66,741 to reflect the amortization of CIAC expense, as a result of ORS Adjustment 31, and the CIAC to Revenue adjustment made in Docket No. 2011-47-WS.

Adjustment 44 – ORS proposes to synchronize allowable interest expense to reflect the rate base after accounting and pro forma adjustments, using the capitalization ratio of 52.44% for debt and 47.56% for equity and a cost of debt of 6.58%. ORS computed an adjustment of ($150,887), resulting in allowable interest expense of $814,691. See Audit Exhibit DFS-8 for ORS's computation of interest expense. Details of the Company's capital structure can be found in the testimony of ORS witness, Dr. Douglas H. Carlisle.

Adjustment 45 – Based upon ORS Water and Wastewater Department calculations, the Company's proposed rates would produce additional revenues of $678,631 for Water Operations and $1,481,681 for Sewer Operations. Details of these adjustments are shown in the direct testimony of ORS Water and Wastewater witness, Willie Morgan.

Adjustment 46 – ORS proposes to adjust miscellaneous revenue for the Company's proposed rate increase. Details of the adjustment for $38,880 are shown in the direct testimony of ORS Water and Wastewater witness, Willie Morgan.

Adjustment 47 – ORS proposes to adjust uncollectible accounts associated with the Company's revenues after ORS's proposed accounting and pro forma adjustments. The adjustment of ($14,405) was provided by ORS Water and Wastewater witness, Willie Morgan.

Adjustment 48 – ORS proposes to adjust gross receipts and utility/commission taxes for the Company's proposed rate increase. A total factor of .00963081, comprised of the SC Department of Revenue factor of .003 and the PSC/ORS factor of .00663081, was used to compute this adjustment. ORS proposes to increase gross receipts taxes by $21,041.

Adjustment 49 – ORS proposes to adjust income taxes for the Company's proposed rate increase. See Audit Exhibit DFS-6 for the computation of income taxes.

Adjustment 50 – ORS proposes to adjust customer growth after the proposed increase. The growth factors of 0.81667% for water operations and 0.67547% were provided by ORS witness Willie Morgan.

Q. PLEASE DESCRIBE THE REMAINING AUDIT EXHIBITS.

A. Audit Exhibit DFS-5 details the computation of ORS's depreciation and amortization expense adjustments. Audit Exhibit DFS-6 details the computation of income taxes. Audit Exhibit DFS-7 details the calculation of the cash working capital allowance and Audit Exhibit DFS-8 details the calculation of return on equity.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.

Carolina Water Service, Inc.
Docket No. 2013-275-WS
Operating Experience, Rate Base and Rates of Return
For the Test Year Ended December 31, 2012
Combined Operations

Description	(1) Application Per Books $	(2) Accounting & Pro Forma Adjustments $		(3) After Accounting & Pro Forma Adjustments $	(4) Applicant's Proposed Increase $		(5) After Applicant's Proposed Increase $
Operating Revenues:							
Service Revenues - Water	2,644,085	16,523	(A)	2,660,608	678,631	(DD)	3,339,239
Service Revenues - Sewer	5,635,912	12,317	(A)	5,648,229	1,481,681	(DD)	7,129,910
Miscellaneous Revenues	221,405	(11,054)	(B)	210,351	38,880	(EE)	249,231
Uncollectible Accounts	(55,684)	(116)	(C)	(55,800)	(14,405)	(FF)	(70,205)
Total Operating Revenues	8,445,718	17,670		8,463,388	2,184,787		10,648,175
Maintenance Expenses:							
Salaries and Wages	1,210,999	(290,386)	(D)	920,613	0		920,613
Purchased Power	593,738	(1,784)	(E)	591,954	0		591,954
Purchased Sewer & Water - Pass Through	(84,561)	0		(84,561)	0		(84,561)
Maintenance and Repair	917,320	810,950	(F)	1,728,270	0		1,728,270
Maintenance Testing	99,515	(25,242)	(G)	74,273	0		74,273
Meter Reading	47,640	(1,103)	(H)	46,537	0		46,537
Chemicals	275,085	(11,118)	(I)	263,967	0		263,967
Transportation	212,133	(45,140)	(J)	166,993	0		166,993
Operating Expense Charged to Plant	(374,531)	191,286	(K)	(183,245)	0		(183,245)
Total	2,897,338	627,463		3,524,801	0		3,524,801
General Expenses:							
Salaries and Wages	550,518	35,508	(L)	586,026	0		586,026
Office Supplies & Other Office Expense	294,721	(48,302)	(M)	246,419	0		246,419
Regulatory Commission Expense	44,335	77,869	(N)	122,204	0		122,204
Pension & Other Benefits	342,290	(30,123)	(O)	312,167	0		312,167
Rent	2,036	0		2,036	0		2,036
Insurance	177,994	0		177,994	0		177,994
Office Utilities	291,717	(7,351)	(P)	284,366	0		284,366
Outside Services - Other	141,289	(56,330)	(Q)	84,959	0		84,959
Miscellaneous	(2,694)	(2,343)	(R)	(5,037)	0		(5,037)
Total	1,842,206	(31,072)		1,811,134	0		1,811,134
Depreciation	1,184,528	(132,276)	(S)	1,052,252	0		1,052,252
Amortization of CIAC	(340,881)	(1,476)	(T)	(342,357)	0		(342,357)
Taxes Other Than Income	1,276,323	19,703	(U)	1,296,026	21,041	(GG)	1,317,067
Income Taxes - State & Federal	162,977	(41,838)	(V)	121,139	827,633	(HH)	948,772
Amortization of Investment Tax Credit	(8,852)	0		(8,852)	0		(8,852)
Amortization of Plant Acquisition Adjustment	(9,862)	0		(9,862)	0		(9,862)
Total	2,264,233	(155,887)		2,108,346	848,674		2,957,020
Total Operating Expenses	7,003,777	440,504		7,444,281	848,674		8,292,955
Total Operating Income	1,441,941	(422,834)		1,019,107	1,336,113		2,355,220
Interest During Construction	(12,165)	12,165	(W)	0	0		0
Customer Growth	0	7,124	(X)	7,124	9,618	(II)	16,742
Net Income for Return	1,454,106	(427,875)		1,026,231	1,345,731		2,371,962
Original Cost Rate Base:							
Gross Plant in Service	57,248,521	(4,202,290)	(Y)	53,046,231	0		53,046,231
Accumulated Depreciation	(10,003,095)	1,831,858	(Z)	(8,171,237)	0		(8,171,237)
Net Plant in Service	47,245,426	(2,370,432)		44,874,994	0		44,874,994
Cash Working Capital	592,444	74,548	(AA)	666,992	0		666,992
Contributions in Aid of Construction	(18,552,488)	66,741	(BB)	(18,485,747)	0		(18,485,747)
Accumulated Deferred Income Taxes	(2,811,142)	0		(2,811,142)	0		(2,811,142)
Customer Deposits	(329,055)	0		(329,055)	0		(329,055)
Advances in Aid of Construction	(1,600)	0		(1,600)	0		(1,600)
Plant Acquisition Adjustment	(304,009)	0		(304,009)	0		(304,009)
Total Rate Base	25,839,576	(2,229,143)		23,610,433	0		23,610,433
Return on Rate Base	5.58%			4.35%			10.05%
Operating Margin	5.78%			2.50%			14.62%
Interest Expense	965,578	(150,887)	(CC)	814,691			814,691

Note: Return on Rate Base in column (1) is calculated by using Total Operating Income divided by Total Rate Base.

Carolina Water Service, Inc.
Docket No. 2013-275-WS
Operating Experience, Rate Base and Rates of Return
For the Test Year Ended December 31, 2012
Water Operations

Description	(1) Application Per Books $	(2) Accounting & Pro Forma Adjustments $		(3) After Accounting & Pro Forma Adjustments $	(4) Applicant's Proposed Increase $		(5) After Applicant's Proposed Increase $
Operating Revenues:							
Service Revenues - Water	2,644,085	16,523	(A)	2,660,608	678,631	(DD)	3,339,239
Miscellaneous Revenues	93,278	(25,921)	(B)	67,357	12,138	(EE)	79,495
Uncollectible Accounts	(23,460)	5,592	(C)	(17,868)	(4,525)	(FF)	(22,393)
Total Operating Revenues	2,713,903	(3,806)		2,710,097	686,244		3,396,341
Maintenance Expenses:							
Salaries and Wages	510,194	(122,340)	(D)	387,854	0		387,854
Purchased Power	100,580	(1,784)	(E)	98,796	0		98,796
Purchased Water - Pass Through	(5,970)	0		(5,970)	0		(5,970)
Maintenance and Repair	145,720	255,326	(F)	401,046	0		401,046
Maintenance Testing	55,631	(24,341)	(G)	31,290	0		31,290
Meter Reading	20,071	(465)	(H)	19,606	0		19,606
Chemicals	115,893	(4,684)	(I)	111,209	0		111,209
Transportation	89,372	(24,604)	(J)	64,768	0		64,768
Operating Expense Charged to Plant	(157,790)	80,589	(K)	(77,201)	0		(77,201)
Total	873,701	157,697		1,031,398	0		1,031,398
General Expenses:							
Salaries and Wages	231,933	14,960	(L)	246,893	0		246,893
Office Supplies & Other Office Expense	111,102	(7,286)	(M)	103,816	0		103,816
Regulatory Commission Expense	18,678	32,806	(N)	51,484	0		51,484
Pension & Other Benefits	144,207	(12,691)	(O)	131,516	0		131,516
Rent	858	0		858	0		858
Insurance	74,989	0		74,989	0		74,989
Office Utilities	122,900	(3,097)	(P)	119,803	0		119,803
Outside Services - Other	59,525	(23,732)	(Q)	35,793	0		35,793
Miscellaneous	(1,135)	(987)	(R)	(2,122)	0		(2,122)
Total	763,057	(27)		763,030	0		763,030
Depreciation	415,964	(76,115)	(S)	339,849	0		339,849
Amortization of CIAC	(116,254)	(935)	(T)	(117,189)	0		(117,189)
Taxes Other Than Income	537,715	60	(U)	537,775	6,609	(GG)	544,384
Income Taxes - State & Federal	68,662	(75,257)	(V)	(6,595)	259,960	(HH)	253,365
Amortization of Investment Tax Credit	(3,729)	0		(3,729)	0		(3,729)
Amortization of Plant Acquisition Adjustment	(4,673)	0		(4,673)	0		(4,673)
Total	897,685	(152,247)		745,438	266,569		1,012,007
Total Operating Expenses	2,534,443	5,423		2,539,866	266,569		2,806,435
Total Operating Income	179,460	(9,229)		170,231	419,675		589,906
Interest During Construction	(5,125)	5,125	(W)	0	0		0
Customer Growth	0	1,390	(X)	1,390	3,428	(II)	4,818
Net Income for Return	184,585	(12,964)		171,621	423,103		594,724
Original Cost Rate Base:							
Gross Plant in Service	18,302,565	(2,837,906)	(Y)	15,464,659	0		15,464,659
Accumulated Depreciation	(3,593,187)	1,009,019	(Z)	(2,584,168)	0		(2,584,168)
Net Plant in Service	14,709,378	(1,828,887)		12,880,491	0		12,880,491
Cash Working Capital	204,595	19,709	(AA)	224,304	0		224,304
Contributions in Aid of Construction	(6,487,854)	(935)	(BB)	(6,488,789)	0		(6,488,789)
Accumulated Deferred Income Taxes	(1,184,334)	0		(1,184,334)	0		(1,184,334)
Customer Deposits	(138,631)	0		(138,631)	0		(138,631)
Advances in Aid of Construction	(800)	0		(800)			(800)
Plant Acquistion Adjustment	(158,291)	0		(158,291)	0		(158,291)
Total Rate Base	6,944,063	(1,810,113)		5,133,950	0		5,133,950
Return on Rate Base	2.58%			3.34%			11.58%
Operating Margin	-8.19%			-0.20%			12.29%
Interest Expense	406,798	(229,648)	(CC)	177,150			177,150

Note: Return on Rate Base in column (1) is calculated by using Total Operating Income divided by Total Rate Base.

Carolina Water Service, Inc.
Docket No. 2013-275-WS
Operating Experience, Rate Base and Rates of Return
For the Test Year Ended December 31, 2012
Sewer Operations

Description	(1) Application Per Books $	(2) Accounting & Pro Forma Adjustments $		(3) After Accounting & Pro Forma Adjustments $	(4) Applicant's Proposed Increase $		(5) After Applicant's Proposed Increase $
Operating Revenues:							
Service Revenues - Sewer	5,635,912	12,317	(A)	5,648,229	1,481,681	(DD)	7,129,910
Miscellaneous Revenues	128,127	14,867	(B)	142,994	26,742	(EE)	169,736
Uncollectible Accounts	(32,224)	(5,708)	(C)	(37,932)	(9,880)	(FF)	(47,812)
Total Operating Revenues	5,731,815	21,476		5,753,291	1,498,543		7,251,834
Maintenance Expenses:							
Salaries and Wages	700,805	(168,046)	(D)	532,759	0		532,759
Purchased Power	493,158	0	(E)	493,158	0		493,158
Purchased Sewer - Pass Through	(78,591)	0		(78,591)	0		(78,591)
Maintenance and Repair	771,600	555,624	(F)	1,327,224	0		1,327,224
Maintenance Testing	43,884	(901)	(G)	42,983	0		42,983
Meter Reading	27,569	(638)	(H)	26,931	0		26,931
Chemicals	159,192	(6,434)	(I)	152,758	0		152,758
Transportation	122,761	(20,536)	(J)	102,225	0		102,225
Operating Expense Charged to Plant	(216,741)	110,697	(K)	(106,044)	0		(106,044)
Total	2,023,637	469,766		2,493,403	0		2,493,403
General Expenses:							
Salaries and Wages	318,585	20,548	(L)	339,133	0		339,133
Office Supplies & Other Office Expense	183,619	(41,016)	(M)	142,603	0		142,603
Regulatory Commission Expense	25,657	45,063	(N)	70,720	0		70,720
Pension & Other Benefits	198,083	(17,432)	(O)	180,651	0		180,651
Rent	1,178	0		1,178	0		1,178
Insurance	103,005	0		103,005	0		103,005
Office Utilities	168,817	(4,254)	(P)	164,563	0		164,563
Outside Services - Other	81,764	(32,598)	(Q)	49,166	0		49,166
Miscellaneous	(1,559)	(1,356)	(R)	(2,915)	0		(2,915)
Total	1,079,149	(31,045)		1,048,104	0		1,048,104
Depreciation	768,564	(56,161)	(S)	712,403	0		712,403
Amortization of CIAC	(224,627)	(541)	(T)	(225,168)	0		(225,168)
Taxes Other Than Income	738,608	19,643	(U)	758,251	14,432	(GG)	772,683
Income Taxes - State & Federal	94,315	33,419	(V)	127,734	567,673	(HH)	695,407
Amortization of Investment Tax Credit	(5,123)	0		(5,123)	0		(5,123)
Amortization of Plant Acquisition Adjustment	(5,189)	0		(5,189)	0		(5,189)
Total	1,366,548	(3,640)		1,362,908	582,105		1,945,013
Total Operating Expenses	4,469,334	435,081		4,904,415	582,105		5,486,520
Total Operating Income	1,262,481	(413,605)		848,876	916,438		1,765,314
Interest During Construction	(7,040)	7,040	(W)	0	0		0
Customer Growth	0	5,734	(X)	5,734	6,190	(II)	11,924
Net Income for Return	1,269,521	(414,911)		854,610	922,628		1,777,238
Original Cost Rate Base:							
Gross Plant in Service	38,945,956	(1,364,384)	(Y)	37,581,572	0		37,581,572
Accumulated Depreciation	(6,409,908)	822,839	(Z)	(5,587,069)	0		(5,587,069)
Net Plant in Service	32,536,048	(541,545)		31,994,503	0		31,994,503
Cash Working Capital	387,849	54,839	(AA)	442,688	0		442,688
Contributions in Aid of Construction	(12,064,634)	67,676	(BB)	(11,996,958)	0		(11,996,958)
Accumulated Deferred Income Taxes	(1,626,808)	0		(1,626,808)	0		(1,626,808)
Customer Deposits	(190,424)	0		(190,424)	0		(190,424)
Advances in Aid of Construction	(800)	0		(800)	0		(800)
Plant Acquisition Adjustment	(145,718)	0		(145,718)	0		(145,718)
Total Rate Base	18,895,513	(419,030)		18,476,483	0		18,476,483
Return on Rate Base	6.68%			4.63%			9.62%
Operating Margin	12.40%			3.77%			15.72%
Interest Expense	558,780	78,761	(CC)	637,541			637,541

Note: Return on Rate Base in column (1) is calculated by using Total Operating Income divided by Total Rate Base.

Carolina Water Service, Inc.
Docket No. 2013-275-WS
Explanation of Accounting and Pro Forma Adjustments
For the Test Year Ended December 31, 2012

Description	$ Combined Operations	$ Water Operations	$ Sewer Operations
Accounting and Pro Forma Adjustments			
Operating Revenues			
(A) Service Revenues			
1 To adjust service revenues to reflect test year customer billings.			
Per ORS	28,840	16,523	12,317
Per CWS	15,892	29,392	(13,500)
(B) Miscellaneous Revenues			
2 To adjust miscellaneous revenues to reflect increase in late payments, notification fees and other revenues.			
Per ORS	(11,054)	(25,921)	14,867
Per CWS	0	0	0
(C) Uncollectible Accounts			
3 To adjust uncollectible accounts to reflect accounting and pro forma adjustments to service revenues.			
Per ORS	(116)	5,592	(5,708)
Per CWS	(184)	(261)	77
Maintenance Expenses			
(D) Salaries & Wages			
4 To annualize operators' salaries for the test year.			
Per ORS	(290,386)	(122,340)	(168,046)
Per CWS	(146,411)	(78,637)	(67,774)
(E) Purchased Power			
5 The Company proposes to adjust purchased power in direct correlation with annualized revenues.			
Per ORS	0	0	0
Per CWS	(63)	1,118	(1,181)

Carolina Water Service, Inc.
Docket No. 2013-275-WS
Explanation of Accounting and Pro Forma Adjustments
For the Test Year Ended December 31, 2012

Description	$ Combined Operations	$ Water Operations	$ Sewer Operations
6 ORS proposes to remove purchased power associated with Indian Pines wells no longer used and useful.			
Per ORS	(1,784)	(1,784)	0
Per CWS	0	0	0
Total Per ORS	(1,784)	(1,784)	0
Total Per CWS	(63)	1,118	(1,181)
(F) Maintenance and Repair			
7 ORS proposes to reduce expenses for nonallowable items.			
Per ORS	(33,251)	(16,793)	(16,458)
Per CWS	0	0	0
8 ORS proposes to remove maintenance and repairs associated with Indian Pines wells no longer used and useful.			
Per ORS	(1,463)	(1,457)	(6)
Per CWS	0	0	0
9 ORS proposes to reclassify as expenses, items improperly capitalized.			
Per ORS	846,864	273,576	573,288
Per CWS	0	0	0
10 ORS proposes to capitalize items improperly expensed.			
Per ORS	(1,200)	0	(1,200)
Per CWS	0	0	0
Total Per ORS	810,950	255,326	555,624
Total Per CWS	0	0	0
(G) Maintenance Testing			
11 ORS proposes to reduce expenses for nonallowable items.			
Per ORS	(23,037)	(22,138)	(899)
Per CWS	0	0	0

Carolina Water Service, Inc.
Docket No. 2013-275-WS
Explanation of Accounting and Pro Forma Adjustments
For the Test Year Ended December 31, 2012

Description	$ Combined Operations	$ Water Operations	$ Sewer Operations
12 ORS proposes to remove maintenance testing associated with Indian Pines wells no longer used and useful.			
Per ORS	(2,205)	(2,203)	(2)
Per CWS	0	0	0
Total Per ORS	(25,242)	(24,341)	(901)
Total Per CWS	0	0	0
(H) Meter Reading			
13 ORS proposes to reduce expenses for nonallowable items.			
Per ORS	(1,103)	(465)	(638)
Per CWS	0	0	0
(I) Chemicals			
14 The Company proposes to adjust chemicals in direct correlation with annualized revenues.			
Per ORS	0	0	0
Per CWS	907	1,288	(381)
15 ORS proposes to reduce expenses for nonallowable items.			
Per ORS	(11,064)	(4,661)	(6,403)
Per CWS	0	0	0
16 ORS proposes to remove chemicals associated with Indian Pines wells no longer used and useful.			
Per ORS	(54)	(23)	(31)
Per CWS	0	0	0
Total Per ORS	(11,118)	(4,684)	(6,434)
Total Per CWS	907	1,288	(381)
(J) Transportation			
17 To adjust for allocated transportation expense including fuel and auto repairs.			
Per ORS	(45,140)	(24,604)	(20,536)
Per CWS	(46,088)	(25,500)	(20,588)

Carolina Water Service, Inc.
Docket No. 2013-275-WS
Explanation of Accounting and Pro Forma Adjustments
For the Test Year Ended December 31, 2012

Description	$ Combined Operations	$ Water Operations	$ Sewer Operations
(K) Operating Expenses Charged to Plant			
18 To adjust operating expense charged to plant (capitalized time) for actual salary expenses and associated taxes and benefits.			
Per ORS	191,286	80,589	110,697
Per CWS	44,221	42,793	1,428
General Expenses			
(L) Salaries & Wages			
19 To annualize office salaries for the test year.			
Per ORS	35,508	14,960	20,548
Per CWS	40,855	14,191	26,664
(M) Office Supplies & Other Office Expense			
20 To remove DHEC fines and penalties.			
Per ORS	(31,009)	0	(31,009)
Per CWS	(31,009)	0	(31,009)
21 ORS proposes to reduce expenses for other nonallowable items.			
Per ORS	(17,293)	(7,286)	(10,007)
Per CWS	0	0	0
Total Per ORS	(48,302)	(7,286)	(41,016)
Total Per CWS	(31,009)	0	(31,009)
(N) Regulatory Commission Expense			
22 To amortize current and unamortized prior rate case expenses over a three-year period.			
Per ORS	77,869	32,806	45,063
Per CWS	340,359	143,385	196,974
(O) Pension & Other Benefits			
23 To annualize pension and other benefits associated with the adjusted test year salaries.			
Per ORS	(30,123)	(12,691)	(17,432)
Per CWS	(7,135)	(5,580)	(1,555)

Carolina Water Service, Inc.
Docket No. 2013-275-WS
Explanation of Accounting and Pro Forma Adjustments
For the Test Year Ended December 31, 2012

Description	$ Combined Operations	$ Water Operations	$ Sewer Operations
(P) Office Utilities			
24 ORS proposes to reduce expenses for nonallowable items.			
Per ORS	(7,351)	(3,097)	(4,254)
Per CWS	0	0	0
(Q) Outside Services - Other			
25 ORS proposes to reduce expenses for nonallowable items.			
Per ORS	(9,969)	(4,200)	(5,769)
Per CWS	0	0	0
26 ORS proposes to capitalize items improperly expensed.			
Per ORS	(46,361)	(19,532)	(26,829)
Per CWS	0	0	0
Total Per ORS	(56,330)	(23,732)	(32,598)
Total Per CWS	0	0	0
(R) Miscellaneous			
27 The Company proposes to include an adjustment for a Leak Mitigation Program.			
Per ORS	0	0	0
Per CWS	42,507	13,687	28,820
28 ORS proposes to reduce expenses for nonallowable items.			
Per ORS	(2,343)	(987)	(1,356)
Per CWS	0	0	0
Total Per ORS	(2,343)	(987)	(1,356)
Total Per CWS	42,507	13,687	28,820
(S) Depreciation Expense			
29 To annualize depreciation expense for known and measurable plant in service. See Audit Exhibit DFS-5.			
Per ORS	(132,276)	(76,115)	(56,161)
Per CWS	22,500	(12,006)	34,506

Carolina Water Service, Inc.
Docket No. 2013-275-WS
Explanation of Accounting and Pro Forma Adjustments
For the Test Year Ended December 31, 2012

Description	$ Combined Operations	$ Water Operations	$ Sewer Operations
(T) Amortization of Contributions in Aid of Construction (CIAC)			
30 To annualize the amortization of CIAC expense. See Audit Exhibit DFS-5.			
Per ORS	(1,476)	(935)	(541)
Per CWS	(7,520)	(4,325)	(3,195)
(U) Taxes Other Than Income			
31 To adjust payroll taxes associated with the adjusted test year salaries.			
Per ORS	(4,440)	(1,871)	(2,569)
Per CWS	23,836	8,384	15,452
32 ORS proposes to remove property taxes associated with Indian Pines wells no longer used and useful.			
Per ORS	(1,782)	(751)	(1,031)
Per CWS	0	0	0
33 To adjust gross receipts and utility/commission taxes after the accounting and pro forma adjustments using a factor of .00963081 (.003 for SCDOR and .00663081 for PSC/ORS).			
Per ORS	25,925	2,682	23,243
Per CWS	149	275	(126)
Total Per ORS	19,703	60	19,643
Total Per CWS	23,985	8,659	15,326
(V) Income Taxes			
34 To adjust state and federal income taxes after accounting and pro forma adjustments. See Audit Exhibit DFS-6.			
Per ORS	(41,838)	(75,257)	33,419
Per CWS	(30,854)	(92,390)	61,536
(W) Interest During Construction (IDC)			
35 To eliminate IDC for rate making purposes.			
Per ORS	12,165	5,125	7,040
Per CWS	12,165	5,125	7,040

Carolina Water Service, Inc.
Docket No. 2013-275-WS
Explanation of Accounting and Pro Forma Adjustments
For the Test Year Ended December 31, 2012

Description	$ Combined Operations	$ Water Operations	$ Sewer Operations
(X) Customer Growth			
36 To adjust for customer growth after the accounting and pro forma adjustments. The growth factors of 0.81667% for water and 0.67547% for sewer were computed by the Water and Wastewater Department.			
Per ORS	7,124	1,390	5,734
Per CWS	0	0	0
(Y) Gross Plant in Service			
37 To adjust plant in service for prior rate case adjustments not made by the Company, nonallowable items, recalculated capitalized time and retirements as of December 31, 2012.			
Per ORS	(3,869,198)	(1,807,061)	(2,062,137)
Per CWS	(223,885)	(94,004)	(129,881)
38 To adjust gross plant in service for net pro forma additions occurring after the test year.			
Per ORS	1,604,813	93,140	1,511,673
Per CWS	3,217,848	349,488	2,868,360
39 To remove excess book value in accordance with previous Commission orders.			
Per ORS	(1,937,905)	(1,123,985)	(813,920)
Per CWS	(718,143)	(416,810)	(301,333)
Total Per ORS	(4,202,290)	(2,837,906)	(1,364,384)
Total Per CWS	2,993,963	255,484	2,738,479
(Z) Accumulated Depreciation			
40 To adjust accumulated depreciation for pro forma plant additions, retirements, nonallowable items and recalculated capitalized time, as well as, depreciation for vehicles and computers.			
Per ORS	542,702	261,309	281,393
Per CWS	603,487	137,314	466,173

Carolina Water Service, Inc.
Docket No. 2013-275-WS
Explanation of Accounting and Pro Forma Adjustments
For the Test Year Ended December 31, 2012

Description	$ Combined Operations	$ Water Operations	$ Sewer Operations
41 To remove accumulated amortization of excess book value in accordance with previous Commission orders.			
Per ORS	1,289,156	747,710	541,446
Per CWS	0	0	0
Total Per ORS	1,831,858	1,009,019	822,839
Total Per CWS	603,487	137,314	466,173
(AA) Cash Working Capital			
42 To adjust cash working capital after accounting and pro forma adjustments. See Audit Exhibit DFS-7.			
Per ORS	74,548	19,709	54,839
Per CWS	29,767	13,343	16,424
(BB) Contributions in Aid of Construction (CIAC)			
43 To adjust CIAC to reflect the amortization of CIAC expense as a result of ORS Adjustment 31 and the CIAC to Revenue adjustment made in Docket No. 2011-47-WS.			
Per ORS	66,741	(935)	67,676
Per CWS	74,210	3,391	70,819
(CC) Interest Expense			
44 To adjust interest on debt using a 52.44% and 47.56% debt to equity ratio and 6.58% cost of debt. ORS computed allowable interest expense after accounting and pro forma adjustments. See Audit Exhibit DFS-8.			
Per ORS	(150,887)	(229,648)	78,761
Per CWS	32,513	(166,588)	199,101
Proposed Increase			
(DD) Service Revenues			
45 To adjust water and sewer service revenues for ORS's recalculation of the Company's proposed rate increase.			
Per ORS	2,160,312	678,631	1,481,681
Per CWS	2,107,706	656,352	1,451,354

Carolina Water Service, Inc.
Docket No. 2013-275-WS
Explanation of Accounting and Pro Forma Adjustments
For the Test Year Ended December 31, 2012

Description	$ Combined Operations	$ Water Operations	$ Sewer Operations
(EE) Miscellaneous Revenues			
46 To adjust miscellaneous revenues for ORS's recalculation of the Company's proposed rate increase.			
Per ORS	38,880	12,138	26,742
Per CWS	0	0	0
(FF) Uncollectible Accounts			
47 To adjust for uncollectible accounts associated with the Company's proposed rate increase.			
Per ORS	(14,405)	(4,525)	(9,880)
Per CWS	(14,121)	(5,823)	(8,298)
(GG) Taxes Other Than Income			
48 To adjust gross receipts and utility/commission taxes associated with the Company's proposed increase using a factor of .00963081 (.003 for SCDOR and .00663081 for PSC/ORS).			
Per ORS	21,041	6,609	14,432
Per CWS	19,720	6,141	13,579
(HH) Income Taxes			
49 To adjust state and federal income taxes associated with the Company's proposed increase. See Audit Exhibit DFS-6.			
Per ORS	827,633	259,960	567,673
Per CWS	793,253	246,478	546,775
(II) Customer Growth			
50 To adjust for customer growth after the proposed increase. The growth factors of 0.81667% for water and 0.67547% for sewer were computed by the Water and Wastewater Department.			
Per ORS	9,618	3,428	6,190
Per CWS	0	0	0

Audit Exhibit DFS-5

Carolina Water Service, Inc.
Depreciation and Amortization Expense Adjustments
Docket No. 2013-275-WS
For the Test Year Ended December 31, 2012

	Combined Operations $	Water Operations $	Sewer Operations $
Depreciation Adjustment			
Gross Plant @ 12/31/12	57,248,521	18,302,565	38,945,956
Add:			
Net Plant Adjustment @ 11/05/13	(4,202,290)	(2,837,906)	(1,364,384)
Less:			
Organization @ 12/31/12	110,429	82,784	27,645
Land @ 12/31/12	275,698	185,696	90,002
Vehicles @ 12/31/12	648,703	245,913	402,790
Computers @ 12/31/12	1,839,483	774,912	1,064,571
Northbrook Allocated Plant @ 12/31/12	729,447	307,316	422,131
Net Plant	49,442,471	13,868,038	35,574,433
Plant Depreciation @ 1.5% (66.67 years)	741,637	208,021	533,616
Vehicles @ 12/31/12	648,703	245,913	402,790
Less: Fully Depreciated Vehicles	244,910	82,558	162,352
Net Vehicles	403,793	163,355	240,438
Vehicle Depreciation @ 16.67% (6 years)	67,312	27,231	40,081
Computers @ 12/31/12	1,839,483	774,912	1,064,571
Less: Fully Depreciated Computers	0	0	0
Net Computers	1,839,483	774,912	1,064,571
Computer Depreciation @ 12.5% (8 years)	229,935	96,864	133,071
Indian Pines Extraordinary Retirement	54,441	54,441	0
Amortization @ 6.67% (15 years)	3,631	3,631	0
Northbrook Allocated Plant @ 12/31/12	729,447	307,316	422,131
Add: Northbrook Plant Depreciation	9,737	4,102	5,635
Total Depreciation	1,052,252	339,849	712,403
Less: Per Books Depreciation	1,184,528	415,964	768,564
ORS Depreciation Expense Adjustment	**(132,276)**	**(76,115)**	**(56,161)**
Company's Depreciation Expense Adjustment	22,500	(12,006)	34,506
Amortization of CIAC Adjustment			
Gross CIAC @ 12/31/12	(22,895,480)	(7,812,598)	(15,082,882)
Less: CIAC to Revenue (Docket 2011-47-WS)	71,713	0	71,713
ORS Adjusted CIAC	(22,823,767)	(7,812,598)	(15,011,169)
CIAC Amortization @ 1.5% (66.67 years)	(342,357)	(117,189)	(225,168)
Less: Per Books Amortization of CIAC	(340,881)	(116,254)	(224,627)
ORS Amortization of CIAC Adjustment	**(1,476)**	**(935)**	**(541)**
Company's Amortization of CIAC Adjustment	(7,520)	(4,325)	(3,195)

Carolina Water Service, Inc.
Docket No. 2013-275-WS
Computation of Income Taxes
For the Test Year Ended December 31, 2012

After Accounting & Pro Forma Adjustments

	$ Combined Operations	$ Water Operations	$ Sewer Operations
Operating Revenues	8,463,388	2,710,097	5,753,291
Operating Expenses	7,331,994	2,550,190	4,781,804
Net Operating Income Before Taxes	1,131,394	159,907	971,487
Less: Annualized Interest Expense	814,691	177,150	637,541
Taxable Income - State	316,703	(17,243)	333,946
State Income Tax %	5.0%	5.0%	5.0%
State Income Taxes	15,835	(862)	16,697
Less: State Income Taxes Per Book	28,004	11,798	16,206
ORS Adjustment to State Income Taxes	**(12,169)**	**(12,660)**	**491**
Taxable Income - Federal	300,868	(16,381)	317,249
Federal Income Taxes %	35.0%	35.0%	35.0%
Federal Income Taxes	105,304	(5,733)	111,037
Less: Federal Income Taxes Per Book	134,973	56,864	78,109
ORS Adjustment to Federal Income Taxes	**(29,669)**	**(62,597)**	**32,928**
ORS Total Adjustment to Income Taxes	**(41,838)**	**(75,257)**	**33,419**

After Applicant's Proposed Increase

	$ Combined Operations	$ Water Operations	$ Sewer Operations
Operating Revenues	10,648,175	3,396,341	7,251,834
Operating Expenses	7,353,035	2,556,799	4,796,236
Net Operating Income Before Taxes	3,295,140	839,542	2,455,598
Less: Annualized Interest Expense	814,691	177,150	637,541
Taxable Income - State	2,480,449	662,392	1,818,057
State Income Tax %	5.0%	5.0%	5.0%
State Income Taxes	124,023	33,120	90,903
Less: State Income Taxes As Adjusted	15,835	(862)	16,697
ORS Adjustment to State Income Taxes	**108,188**	**33,982**	**74,206**
Taxable Income - Federal	2,356,426	629,272	1,727,154
Federal Income Taxes %	35.0%	35.0%	35.0%
Federal Income Taxes	824,749	220,245	604,504
Less: Federal Income Taxes As Adjusted	105,304	(5,733)	111,037
ORS Adjustment to Federal Income Taxes	**719,445**	**225,978**	**493,467**
ORS Total Adjustment to Income Taxes	**827,633**	**259,960**	**567,673**

Carolina Water Service, Inc.
Docket No. 2013-275-WS
Cash Working Capital Allowance
For the Test Year Ended December 31, 2012

After Accounting & Pro Forma Adjustments	$ Combined Operations	$ Water Operations	$ Sewer Operations
Maintenance Expenses	3,524,801	1,031,398	2,493,403
General Expenses	1,811,134	763,030	1,048,104
Total Expenses for Computation	5,335,935	1,794,428	3,541,507
Allowable Rate	12.50%	12.50%	12.50%
Computed Cash Working Capital	666,992	224,304	442,688
Less: Cash Working Capital - Application Per Books	592,444	204,595	387,849
ORS Cash Working Capital Adjustment	**74,548**	**19,709**	**54,839**
Company's Cash Working Capital Adjustment	29,767	13,343	16,424

Audit Exhibit DFS-8

Carolina Water Service, Inc.
Docket No. 2013-275-WS
Return on Equity
Capital Structure at December 31, 2012

Combined Operations

			Application Per Books				After Accounting and Pro forma Adjustments				After Applicant's Proposed Increase			
Description	(Note) Capital Structure	Ratio	Rate Base	Embedded Cost/Return	Overall Cost/Return	Income For Return	Rate Base	Embedded Cost/Return	Overall Cost/Return	Income For Return	Rate Base	Embedded Cost/Return	Overall Cost/Return	Income For Return
Long-Term Debt	$ 180,000,000	52.44%	$ 13,550,274	6.58%	3.45%	$ 891,608	$ 12,381,311	6.58%	3.45%	$ 814,691	$ 12,381,311	6.58%	3.45%	$ 814,691
Members' Equity	163,255,970	47.56%	12,289,302	4.58%	2.18%	562,498	11,229,122	1.88%	0.90%	211,540	11,229,122	13.87%	6.60%	1,557,271
Totals	$ 343,255,970	100.00%	$ 25,839,576		5.63%	$ 1,454,106	$ 23,610,433		4.35%	$ 1,026,231	$ 23,610,433		10.05%	$ 2,371,962

Water Operations

			Application Per Books				After Accounting and Pro forma Adjustments				After Applicant's Proposed Increase			
Description	Capital Structure	Ratio	Rate Base	Embedded Cost/Return	Overall Cost/Return	Income For Return	Rate Base	Embedded Cost/Return	Overall Cost/Return	Income For Return	Rate Base	Embedded Cost/Return	Overall Cost/Return	Income For Return
Long-Term Debt	$ 180,000,000	52.44%	$ 3,641,467	6.58%	3.45%	$ 239,609	$ 2,692,243	6.58%	3.45%	$ 177,150	$ 2,692,243	6.58%	3.45%	$ 177,150
Members' Equity	163,255,970	47.56%	3,302,596	-1.67%	-0.79%	(55,024)	2,441,707	-0.23%	-0.11%	(5,529)	2,441,707	17.10%	8.13%	417,574
Totals	$ 343,255,970	100.00%	$ 6,944,063		2.66%	$ 184,585	$ 5,133,950		3.34%	$ 171,621	$ 5,133,950		11.58%	$ 594,724

Sewer Operations

			Application Per Books				After Accounting and Pro forma Adjustments				After Applicant's Proposed Increase			
Description	Capital Structure	Ratio	Rate Base	Embedded Cost/Return	Overall Cost/Return	Income For Return	Rate Base	Embedded Cost/Return	Overall Cost/Return	Income For Return	Rate Base	Embedded Cost/Return	Overall Cost/Return	Income For Return
Long-Term Debt	$ 180,000,000	52.44%	$ 9,908,807	6.58%	3.45%	$ 652,000	$ 9,689,068	6.58%	3.45%	$ 637,541	$ 9,689,068	6.58%	3.45%	$ 637,541
Members' Equity	163,255,970	47.56%	8,986,706	6.87%	3.27%	617,521	8,787,416	2.47%	1.18%	217,069	8,787,416	12.97%	6.17%	1,139,697
Totals	$ 343,255,970	100.00%	$ 18,895,513		6.72%	$ 1,269,521	$ 18,476,483		4.63%	$ 854,610	$ 18,476,483		9.62%	$ 1,777,238

Note: ORS used the capital structure of the parent company, Utilities, Inc.

THE OFFICE OF REGULATORY STAFF

DIRECT TESTIMONY

OF

DR. DOUGLAS H. CARLISLE

DECEMBER 3, 2013

DOCKET NO. 2013-275-W/S

APPLICATION OF CAROLINA WATER SERVICE, INCORPORATED FOR ADJUSTMENT OF RATE AND CHARGES AND MODIFICATIONS OF CERTAIN TERMS AND CONDITIONS OF WATER AND SEWER SERVICE

DIRECT TESTIMONY OF

DR. DOUGLAS H. CARLISLE

FOR

THE OFFICE OF REGULATORY STAFF

DOCKET NO. 2013-275-WS

IN RE: APPLICATION OF CAROLINA WATER SERVICE, INCORPORATED FOR ADJUSTMENT OF RATES AND CHARGES AND MODIFICATION OF CERTAIN TERMS AND CONDITIONS FOR THE PROVISION OF WATER AND SEWER SERVICE

Q. WOULD YOU PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND YOUR BUSINESS EXPERIENCE?

A. I received a Bachelor of Arts from Brown University, a Masters Degree in Public Administration and a Ph.D. in Government and International Relations, both from the University of Virginia. I have previously testified before the Public Service Commission of South Carolina concerning rate of return. I am a Certified Rate of Return Analyst. After graduate school, I was employed as an evaluator and evaluator-in-charge for about seven years at the United States Government Accountability Office in Washington, D.C. After leaving the GAO, I worked as a market consultant and instructor at Midlands Technical College in South Carolina. Next, I began my employment with the State of South Carolina at the State Reorganization Commission, which functioned as an audit follow-up entity. I moved to my next position with the South Carolina House Education

& Public Works Committee. Before joining ORS, I worked five years for the State Chief Economist as an analyst in the Economist Research Section and as an adjunct to the Board of Economist Advisors. I assumed my current position at ORS in 2005.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?

A. My purpose is to recommend the appropriate range for return on equity for Carolina Water Service, Inc. ("CWS" or "the Company"). I will present my conclusions and their bases for the appropriate return on equity for CWS.

Q. WHAT STANDARDS GOVERN RATE OF RETURN?

The Supreme Court of the United States set standards in two landmark decisions. In the first case, involving a water company, the Court declared:

> A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties; but it has no constitutional right to profits such as are realized or anticipated in highly profitable enterprises or speculative ventures. The return should be reasonably sufficient to assure confidence in the financial soundness of the utility and should be adequate, under efficient and economical management, to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its duties.[1]

This decision, the Bluefield decision, was later reinforced by the decision in another case, Federal Power Commission v. Hope Natural Gas Company:

> The fixing of "just and reasonable" rates, involves a balancing of the investor and consumer interests…. From the investor or company point of view it is important that there be enough revenue not only for operating expenses but also for the capital cost of the business. These include service on the debt and dividends on the stock….. By that standard the return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks. That return,

[1] *Bluefield Water Works & Improvement Company. v. Public Service Commission of West Virginia*, 262 U.S. 679, 692-3 (1923).

> moreover, should be sufficient to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and attract capital.[2]

Q. DOES CWS HAVE TRADED COMMON STOCK?

A. No, its stock is entirely held by Utilities, Inc. of Northbrook, Illinois, which also has no publicly traded stock. Utilities, Inc. was purchased by Corix Utilities in 2012. Corix is owned by the British Columbia Investment Management Corporation.

Q. IF NEITHER THE COMPANY NOR ITS PARENT HAS TRADED STOCK, HOW DID YOU PERFORM YOUR ANALYSIS TO RECOMMEND A RETURN ON EQUITY?

A. To develop a fair rate of return recommendation for CWS, I evaluated the return requirements of investors on the common stock of two groups: publicly held water and sewerage service companies and a Comparable Earnings Model ("CEM") group. I then applied to the first group, two well-known and generally accepted methods for determining a recommended return on equity, the Discounted Cash Flow ("DCF") Model and Capital Asset Pricing Methods ("CAP-M").

Q. WHY DID YOU EXAMINE DATA ON COMPANIES WITH TRADED STOCK?

A. First, CWS has asked for its rates to be determined using the rate-of-return on rate-base methodology. Second, publicly traded water utilities are, after all, in the same line of business as CWS and so share similar risks. Third, data is far more readily available about publicly traded companies, so it is practical to use them.

Q. HOW DID YOU SELECT THESE COMPANIES AND GROUPS?

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[2] *Federal Power Commission v. Hope Natural Gas Company,* 320 U.S. 591, 603 (1944).

A. For my DCF analysis I selected those companies classified as "water utilities" by Value Line or by *Yahoo! Finance* that engage in water distribution to customers and obtain most of their revenues from utility services, which include water and sewerage. For my CEM analysis I selected companies with comparable β's to those of the companies in my DCF Proxy Group.

Q. WHAT CAPITAL STRUCTURE DID YOU USE FOR YOUR ANALYSIS OF CWS?

A. I have adopted the structure stated by Mr. Dylan D'Ascendis in his Direct Testimony. I do not adopt the Company's interest rate on Long-Term Debt because of the interest-only provision and higher-than-normal interest rate. These considerations have led me to suggest an adjustment in the ROE for CWS, which I will discuss later in my testimony.

Q. WHAT IS THE MOST IMPORTANT OVERALL CONSIDERATION IN DETERMINING AN APPROPRIATE RETURN ON EQUITY?

A. Determining comparability is the most important consideration. Under the CEM, which I use, there is a set of assumptions about production and capital inputs. Under all other models, there are various assumptions about risk, and these models all focus on adjusting risk to ascertain what companies are comparable to a regulated utility. As a preliminary step, each of these risk-adjustment models identifies some benchmark or standard that is reasoned to be central to investors' choices. For example, under the DCF, the stream of benefits or cash-flow from dividends, is central. Under the CAP-M, the Risk-Free Rate ("R_f") takes center stage. I will discuss these methods in more detail individually, later in my testimony.

Q. WHAT IS THE ROLE THAT ASSESSING RISK PLAYS IN ESTIMATING A FAIR RETURN FOR CWS?

A. For any regulated utility, one must determine the risk that the company faces in order to estimate a fair return. An appropriate return reflects the return investors require to incur the risk that they face. Economic principles dictate that the higher the risk, the higher the expected return. So too, the lower the risk, the lower the required return. A fair return, then, compensates investors proportionately to the risk they face. A fair return balances investors' and customers' interests. Too high a return places a burden on customers and over-rewards investors. Too low a return places too high a burden on the utility.

DCF Analysis

Q. WHAT IS THE BASIS FOR THE DCF MODEL?

A. This model's basic premise is that investors value stocks based on the stream of cash flows they can enjoy for the indefinite future and that the only certain flow of cash is the value of dividends received. The DCF is a perpetuity, so cash must flow indefinitely; therefore, in the long run, dividend growth cannot exceed company growth. If dividends were to grow faster than the underlying company growth, the dividend would eventually become unsustainable, and the model's basic assumptions would be violated. The growth in dividends, therefore, cannot exceed the growth in earnings. In fact, all indicators of growth must, in the long run, grow at rates compatible with each other. The DCF model is expressed by this formula:

$$K = D_1/P_0 + g;$$

where K = cost of equity capital (ROE); D_1 = current yearly Dividends per Share ("DPS"); P_0 = purchase price; and g = growth.

Q. HOW DO YOU TAKE INTO ACCOUNT THE ASSUMPTIONS ABOUT GROWTH IN YOUR ANALYSIS?

A. There are several steps for applying the assumptions of the DCF Model. Each strategy, in logical order, points to the next.

First, the DCF is a long-term model, so some temporary departures from a straight-line estimate of ROE are to be expected. This reasoning implies that having several indicators of growth is better than having just one. My analysis uses four indicators: 1) Earnings per Share ("EPS") (Exhibit DHC-2); 2) Book Value per Share ("BVPS") (Exhibit DHC-3); 3) Revenue or Earnings (Exhibit DHC-4); and, 4) DPS (Exhibit DHC-5).

Second, my analysis adheres to a steady-state model by using several periods to calculate historical trends and to dampen any temporary divergences. This method provides a more reliable guide to long-term growth. For that reason, I have used three- five- and ten-year averages/means and medians. This approach lessens the impact of any transient phenomena. Such reasoning appeals to common sense. For example, an investor would need some convincing evidence to believe that a company whose earnings and book value having been growing at 5% would suddenly grow at 25%. On the other hand, true departures from the trend have to be recognized.

Third, my approach recognizes the importance of analysts' opinions. Although it might seem that analysts make their living discovering new trends or departures from old ones, their predictions also moderate analyses based strictly on historical data and add some balance to the estimation of growth. Investors know about analysts and may consult them and be influenced by estimates.

Q. HOW DOES YOUR DCF ANALYSIS CONFORM TO THE MODEL WITH REGARD TO THE OTHER TERMS OF THE BASIC DCF EQUATION?

A. The term, $D_1/P_{0,}$ finds a simple expression as Dividend Yield. A very narrow interpretation of the formula would insist upon using a price from the previous year and determining the yearly dividend paid as of a year later. Investors know about companies' histories of dividend increases, however; and they expect increases if a company has a history of increasing dividends. Companies announce their intention to maintain or increase their dividends during the year and price data tends to be an average of prices over time (as in Exhibit DHC-9), so the current dividend yield reflects what has happened leading up to the current moment. Thus the problem with the dividend yield is not knowing what it is at a given moment, but rather that investors expect it to grow. Since investors know that a company may announce an increase in its dividend in the upcoming twelve months after the dividend yield information is available, a simple convention to recognize such a possible increase is to multiply the yield by half-again the growth rate, producing this modified equation:

$$K = ([D_1/P_0]*(1+(½\ g)]) + g$$

While this equation may seem to violate the assumptions of the DCF by having dividends outpace growth or by restricting dividends to a growth rate below companies' growth rates, in fact it is consistent with the model. Expectations of growth are simply applied to dividend yield in this equation. Dividend yield is brought into balance with growth because expectations are incorporated into both parts. The difference between how expectations are incorporated is that, for growth, they are incorporated in the development of the "g" number, whereas, in the dividend yield, they are incorporated in the equation itself.

Q. WHAT DOES YOUR DCF ANALYSIS INDICATE?

A. My DCF analysis indicates that the appropriate ROE for the Company is 9.56%. This number comes partly from increased future dividends and dividend yields, pushed by changes in capital gains and the steady rate of increase and forecasted rates of increase in Sales, BVPS, and EPS (Exhibit DHC-6). I will highlight some notable features of the data.

One noteworthy aspect of the DCF results is the greater growth in DPS compared with the historical trend. This result stands in sharp contrast to those for Sales, BVPS, and EPS. It is consistent with DCF theory and common sense in that, if companies plan to increase dividends, they will have less money for other things.

Methodologically, as discussed earlier, the effect of using multiple periods dampens the recent three-year trend EPS, which would have produced excessively high ROE's, had it been used alone. This observation fits the pattern of recovery from recession and depressed earnings, more severe in non-regulated companies, but present in regulated water companies, too. The long-term growth is slower than the short-term growth. The latter shows a sudden jump, and the median result shows that the greatest jumps come from the larger companies. The two largest companies, American States Water and American Water Works, have the highest gains in EPS, followed by SJW Corporation and another large company, Aqua America. All of these EPS results are shown at Exhibit DHC-2, p.2 of 3.

CEM Analysis

Q. WHAT IS THE BASIC PREMISE OF THE CEM?

A. This Model focuses on the costs of goods and services that generate earnings. For this reason, CEM analyses look at changes in book value. Changes in book value indicate a greater capacity to produce.

The logic of CEM is analogous to that of the DCF. The change in book value comes from the store of value in retained equity. With prudent management and no revolutionary developments, the greater the book value of a company, the greater its ROE should be.

Q. WHAT ARE THE MAJOR CONSIDERATIONS IN IMPLEMENTING THE CEM AND HOW DID YOU ADDRESS THEM?

A. The Model does not indicate a single approach to ascertaining what is comparable and so analyses often look at great quantities of data over long periods of time. Analyses may use whole sectors of the economy, several sectors of the economy, or even stock indices and show several decades of results. While such approaches mitigate threats to the Model, there is no single standard for comparability. The lack of a benchmark makes conclusions from the data judgmental. Although there is nothing wrong with applying judgment to interpret results, I have elected to use a more formulaic approach in order to make my analysis more transparent.

The standard I used to select comparable stocks was the range of β that Value Line provides for the companies in my DCF Proxy Group. Leaving aside academic arguments about its predictive value, β has intuitive appeal because stocks whose prices vary in the same manner as those of traded water and water and sewer companies probably have something in common with regard to their earning capacity. To further ensure comparability, I selected only stocks whose ten-year β's did not stray very far out of the range of my DCF Proxy Group's. This approach produced a CEM Proxy Group that was fairly large – having 130 companies – and that covered several market sectors (Exhibit DCH-13).

Q. HOW DID YOU APPLY YOUR RATIONALE AND PRECAUTIONS WITH REGARD TO THE CEM?

A. I determined the β's of the utility companies' stocks composing my DCF Proxy Group (Exhibit DHC-7). I then used Value Line's database to select companies whose current Value Line β's fell within this range and eliminated companies in the financial services sector. Removing financial companies was an application of judgment based on my conclusion that such companies would either lag the overall market or enjoy large rebounds due to the large role the financial sector played in the recession from which our country is still recovering. Either lagging or surpassing otherwise comparable companies would make the financial companies atypical and reduce comparability.

Having obtained a variety of companies with comparable β's, I examined the ten-year β-ranges of the companies. Since the overall market has a β of "1," it is logical that the CEM Proxy Group should not contain any companies that were as risky as the overall market, so I eliminated any companies that had reached that level, which is .15 above the highest company in my DCF Proxy Group (Exhibit DHC-7). I placed a ten-year β-floor of less than .15 below the lowest company in my DCF Proxy Group. The selection procedures produced a CEM Proxy Group of 130 companies with many different lines of business among them.

Q. WHAT INFORMATION ABOUT THESE CEM PROXY GROUP COMPANIES DID YOU OBTAIN?

A. I obtained the ten-year book value growth for each company and the Value Line projected book value growth. I then calculated my CEM results from this group, using several different procedures.

Q. WHAT WERE THESE PROCEDURES AND WHY DID YOU USE THEM?

A. I first calculated the simple average or mean book value growth of the CEM Proxy Group, but I was aware that a few companies had rather extreme values. As a precaution against allowing a few companies to exert too much influence on the calculation, I included the median of the values and then calculated the average of the mean and median growth in book value, for the historical ten-year period and for the predicted growth (Exhibit DHC-13).

As a defense against variation in book value growth among different levels of β, I divided the CEM Proxy Group into different β-ranges – stratifying the Group – by taking the mean and median of each range and then averaging the ranges. I averaged the stratified and unstratified results. To reflect the distribution of β's within the DCF Proxy Group, I weighted the stratified results. I averaged this result with the previous result.

The average of the historical and projected book value results is a 10.36% growth in book value. The average of the stratified historical and projected book value results is 10.28%. These two results averaged together yield 10.32%. The average of the weighted stratified calculation is 10.10%. Averaging this number with 10.32% produces 10.21%, which is my CEM result (Exhibit DHC-13, p. 5 of 5). It should be noted that stratification receives more emphasis using my procedure as a means of ensuring comparability of the CEM companies to water companies with traded stock.

Q. IS THIS METHODOLOGY BASED MOSTLY ON STRESSING THE IMPORTANCE OF β?

A. No. Although β plays a major role in the analysis, the CEM Proxy Group contains a very wide diversity of companies, from Conagra to PetSmart and from Microsoft to Johnson & Johnson. The CEM is influenced by several sectors of business, each with its own characteristics apart from how its stocks co-vary with the market. Furthermore, this methodology stresses book value growth, as opposed to dividends or the hurdle- or risk-free-rate.

Q. WHAT NOTABLE TRENDS DID YOUR CEM UNCOVER?

A. There were two notable trends: (1) as the data was stratified and weighted to reflect the DCF proxy group, the growth rate in book value declined and (2) future growth is less than past growth. The first fact is generally consistent with the idea that β measures market risk, although there is some variation. The second fact is consistent with my DCF input results (Exhibit DHC-3, pp. 2 and 3 of 3). In the longer run, slower growth in book value should mean slower growth in earnings, although there should be a lag because past growth in book value indicates present and future growth in earnings.

<u>CAP-M Analysis</u>

Q. WHAT IS THE BASIC PREMISE OF THE CAP-M?

A. This model assumes that there is a knowable R_f, Market Rate of Return (“R_m”), and Equity Risk Premium (“ERP”). In this respect, the CAP-M belongs to a family of models and methods for which a risk premium is central. The CAP-M uses the β statistic to adjust the ERP for the risk of particular companies, sectors, or even portions of companies.

Q. HOW IS THE PREMISE REALIZED IN CAP-M ANALYSIS?

A. At the basic, general level, CAP-M uses the following formula:

$$K = R_f + (\beta * (R_m - R_f)),$$

Where K is ROE and the other notations are those I have discussed. The innermost parentheses contain the ERP, which is adjusted for risk by β, with the assumption that all risks not captured by β can be diversified away.

Q. WHAT ARE SOME OF THE ISSUES SURROUNDING THE CAP-M AND ITS APPLICATION?

A. There have been debates about whether β properly measures systematic risk, with some researchers finding that it does not and others finding that it does. Some people have taken issue with whether β should be adjusted, which is not an issue with my analysis, since I use Value Line's adjusted β's. Another set of issues turns on whether the R_m is properly measured by the source, Stocks, Bonds, Bills and Inflation, 2013 ("SBBI", a.k.a. "the Ibbotson book") or whether different periods of time should be used. Within that debate is another one on whether to use the arithmetic mean ("simple average") or the geometric mean ("compound annual growth rate"). I use the latter because it reflects the long-term returns that stocks could have actually brought an investor.

Although those are the prominent debates, there is another issue concerning the third term of the CAP-M equation, R_f. Although one could argue about whether highly rated corporate bonds are truly risk-free or whether one should use longer- or shorter-term Treasury securities, such discussions are completely overshadowed by the question of whether actions by the Federal Reserve Board have masked or distorted market forces in such a way or to such a degree that the R_f has become unknowable while the current policy is in effect without any prospect of change. There should be only one market risk-premium, which can be adjusted for individual companies' risks, so it is essential to have confidence in the R_f benchmark.

Q. DO YOU BELIEVE THAT THE ISSUE WITH THE R_f IN THE CAP-M HAS BEEN OVERCOME?

A. While it may have been a concern when the Federal Reserve initiated its "Twist" policy of buying long-term Treasury securities, I believe that this concern is rapidly disappearing. My reasoning is threefold. First, there are clear signs that the Federal Reserve's policy is coming to an end, albeit a very gradual one, and there are definite market responses anticipating the end of the policy. Second, it is possible that the policy will end sooner for longer-term securities than for shorter-term ones. This second reason is that the "Twist" policy came about later than the initial intervention and the market has already anticipated an exit from it as demonstrated by the increasing steepness of the yield curve (see Exhibit DHC-11). Since I consider the CAP-M to be more accurate when there is either notable interaction between idiosyncratic risk and β[3] or in the long-run[4], recent reactions to the mere possibility of a slowing of Federal Reserve purchases, sometimes called the "Taper," indicate that it is not too soon to use the

[3] "Beta Is Still Useful!" a paper byYexiao Xu and Yihua Zhao, School of Management, The University of Texas at Dallas, November 2011 revision.
[4] Ravi Jagannathan and Ellen R. McGrattan, "The CAPM Debate," Federal Reserve Bank of Minneapolis Quarterly Review, Vol. 19, No. 4, fall 1995, pp. 2-17.

CAP-M again. The third indication that the R_f is now more knowable is that long-term Treasury rates have begun to rise (Exhibit DHC-11).

Over four-fifths of the professional economists who were polled by Blue Chip responded that they thought the Taper would be announced at least by the March meeting of the Federal Open Market Committee.[5] In other words, almost all of the economists thought that Quantitative Easing – the Federal Reserve's purchasing of $85 billion per month in Treasury and mortgage-backed securities – would begin to end in the first quarter of 2014. A decrease in purchases of Treasury securities by the Federal Reserve will decrease their price and increase their interest rates. With higher governmental rates, the hurdle that corporate bonds will have to clear in order to attract investors will be higher, so it is likely corporate bond rates will rise, too. For the CAP-M, the effect upon Treasury securities is the more important and more direct effect of the termination of Federal Reserve policy. Market forces will once again set the R_f, and we will have a good idea of what the ERP is. That the interest rates of Treasury bonds are already rising indicates the market is "pricing in" this upcoming change (Exhibit DHC-14, entire).

Q. HOW DID YOU PERFORM YOUR CAP-M?

A. For the R_f I used the projected 30-year Treasury bond yield, using a projection from a poll of economists conducted by Blue Chip™. This consensus forecast looks 18 months into the future. It is currently 4.2% (Exhibit DHC-8). For the R_m, I used the compound average growth rate for stocks as published in SBBI. I averaged the returns for the deciles of company size and obtained an average (geometric mean or compound annual growth rate) of 11.1% (Exhibit DHC-8). The ERP is the difference of these two

[5] *Blue Chip Financial Forecasts,* Vol. 32, No. 11, November 1, 2013, p.14.

numbers, or 6.9. The median β for the water companies in my DCF Proxy Group is 0.70. When one multiplies 6.9% by 0.70, the result is 4.83, which is the risk-adjusted ERP. This step is necessary because not all equities are equally risky. It is, therefore, necessary to take into account how they vary with other equities, which is what β measures. The calculation shows that a company comparable to CWS should receive 4.83 above the R_f, which is 9.03 (Exhibit DHC-8).

<u>Conclusion</u>

Q. WHAT IS THE RANGE OF YOUR RESULTS?

A. The top of my range is my CEM result, at 10.21 and the bottom of my range is 9.03, which is my CAP-M result. My DCF result was 9.56%. The average of my results is 9.60%.

Q. DO YOU HAVE A RECOMMENDATION WITHIN YOUR RANGE, BASED ON ANY SPECIAL CONSIDERATIONS THAT YOU BELIEVE APPROPRIATE FOR EVALUATING YOUR RANGE?

A. I suggest that more weight be placed on the bottom half of the range. The parent company undertook an expensive form of debt at rates that were above the market at the time the debt was incurred and has shown no inclination to dilute that expensive rate. Utilities, Inc. cannot escape the debt by paying off earlier without being required to make the lenders whole immediately, and it has chosen to make significant payments by having an interest-only phase of the loan. Undoubtedly, some portion of what the Company's customers pay in their bills goes to pay the excessive interest incurred by the parent company. Since the risk posed by this high rate did not arise because of any actions of

CWS, CWS's customers should not have to pay for it. Accordingly, I recommend the lower half of my range.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes, it does.

Office of Regulatory Staff
Economic Overview
Carolina Water Service, Inc.
Docket #2013-275-WS

A Review of Some Major Events of the Recession and Recovery

Over the past five-and-a-half years, the United States has experienced dramatic economic changes. The landmark for these changes was the March 2008 insolvency of Bear Stearns. The firm's hedge funds held subprime mortgages with large losses, leading to its sale to J. P. Morgan Chase. The trouble spread to major Wall Street firms that had loaned money on the basis of assets that turned out to be worth less than thought. Falling prices of houses and equities reduced the wealth of households and created uncertainty about the economy. The S&P 500 Index fell as much as 50% during 2008 and housing prices fell 13% in the twelve-month run-up to the recession. A large number of banks and other financial institutions had balance sheets that were suddenly deemed untrustworthy because they reflected holdings of securities whose underlying value was tied to houses purchased with nontraditional mortgages. The best known example of the sudden collapse in trust is the bankruptcy of Lehman Brothers on September 15, 2008, the largest bankruptcy filing in U.S. history, with Lehman holding over $600 billion in assets. [1]

When falling housing prices led to defaults and foreclosures, the value of corporate assets suffered. Moreover, some financial instruments, such as credit default swaps, greatly magnified the effects of declining value. Fannie Mae lost $29 Billion on Write-Downs. The Federal Reserve announced that it planned to buy up $600 billion in debt and mortgage-backed securities from Fannie

[1] "Lehman folds with record $613 billion debt". Marketwatch. 2008-09-15. http://www.marketwatch.com/news/story/story.aspx?guid={2FE5AC05-597A-4E71-A2D5-9B9FCC290520}&siteid=rss. Retrieved on 2008-09-15.

Mae, Freddie Mac and Ginnie Mae, the three government-sponsored finance firms established to promote home ownership.

As a result of steep drops in the value of assets and a dramatic drop in the willingness to lend, the Federal Reserve began a series of cuts in the Federal Funds Rate, the rate at which it lends banks money, starting with a half percent cut to 5.75% on August 16, 2007 and culminating in a drop on December 16, 2008 to a range between 0.0% and 0.25%. On November 10, 2008, the US Treasury announced investment of 40 billion dollars in preferred stock of AIG. In the First Quarter of 2009, the Federal Reserve purchased $1.25 trillion in mortgage-backed securities and $200 billion in agency debt.

On March 18, 2009, the Federal Reserve announced plans to purchase up to $300 billion of longer-term Treasury securities. On June 24, 2009, it reiterated its plans to buy Treasury securities. Because the Federal Reserve had set rates near zero already, it could not cut them much. If there were deflation, real interest rates would rise, so its latest move circumvented the limitations of interest-rate policy by injecting liquidity directly into the monetary system through a variety of devices but especially through special credit facilities.[2]

The Federal Reserve's special programs were designed to ease credit in the face of illiquidity arising from the credit crisis that was both cause and result of the recession. Two measures of illiquidity, the "TED Spread" and the "OIS-LIBOR Spread" had widened dramatically. The former is the difference

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[2] Most of the rest of the above discussion comes from these sources:

Federal Reserve Bank of St. Louis: January 2009 "Man the Lifeboats!" By Kevin L. Kliesen; and,

"The Global Economic & Financial Crisis: A Timeline," Mauro F. Guillén Director of the Lauder Institute, Wharton School, University of Pennsylvania [no date; see: http://lauder.wharton.upenn.edu/pages/pdf/class_info/Chronology_Economic_Financial_Crisis.pdf] between the Three-Month U.S. Treasury Bill rate and the London Interbank Offered Rate ("LIBOR").[3] The latter is the difference between the Overnight Indexed Swap ("OIS") and LIBOR. Both of these indicators shot up during the credit crisis, but returned to near-normal levels. As a result of the return to a more normal credit situation, the Federal Reserve let these special facilities lapse.[4]

As some measure of confidence returned among financial institutions, lingering distrust and the prospect of deflation led the Federal Reserve to begin its "Quantitative Easing" ("QE") policies in late 2008. Under these policies, the Federal Reserve sought to overcome the "Zero Bound" problem: the inability to lower interest rates below zero. By buying US Treasury securities, the QE policies effectively lowered interest rates below zero in order to avoid deflation, economic stagnation or decline, and to stimulate the economy. Part of this effort involved a shift into Treasury bonds away from shorter-term instruments, a policy partly begun in the second stage of QE. The policy, known as the "Twist," involved the Federal Reserve's getting out of shorter term Treasuries and into Longer-Term Treasuries in order to stimulate lending in capital projects. As there have been indications that the Federal Reserve is about to slow its purchases of Treasury securities, interest rates have increased. At the same time, additional financial pressure has been placed on companies by recent changes in tax law, which increases the capital gains tax on stock dividends and therefore the need for companies to increase their dividend yields. Nonetheless, as GDP continues to grow and unemployment declines very slowly, the very slowness of recovery from the recession five years ago should help companies with reliable growth.

Currently, the Federal Reserve remains on course, instructing the Federal Reserve Bank of New York to purchase $85 billion per month (Exhibit DHC-14a&b), divided between mortgage-backed securities and longer-term Treasury securities. In July, the Federal Reserve's Open-Market Committee

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[3] It used to be the difference between the Euro-Dollar futures contract and the Three-Month U.S. Treasury Bill rate, thence the name "TED" ("Treasury/Eurodollar")

[4] Federal Reserve Statement, January 2009: http://federalreserve.gov/newsevents/press/monetary/20090128a.htm

maintained a target inflation rate of no more than 2% and the target unemployment rate of 6.5%.[5] (See also DHC-12.) Leading up to this meeting there was some pulling back in stock values, tracked by the Federal Reserve itself:

Stock Market, Selected Statistics (1.36) [6]

	Indicator	2010	2011	2012	Oct 2012	Nov 2012	Dec 2012	Jan 2013	Feb 2013	Mar 2013	Apr 2013	May 2013	Jun 2013
		Prices and trading volume (averages of daily figures)											
	Common stock prices (indexes)												
1	**New York Stock Exchange (Dec. 31, 1965=50)**	7,233.54	7,862.45	8,008.24	8,295.67	8,129.90	8,367.74	8,759.89	8,896.97	9,038.29	9,092.21	9,440.35	9,204.10
2	**Standard & Poor's Corporation (1941-1943=10)‡**	1,139.97	1,267.64	1,379.35	1,437.82	1,394.51	1,422.29	1,480.40	1,512.31	1,550.83	1,570.70	1,639.84	1,618.77
3	**American Stock Exchange (Aug. 31, 1973 = 50)‡**	1,939.79	2,285.19	2,377.55	2,430.56	2,370.36	2,374.90	2,399.22	2,392.41	2,401.79	2,377.81	2,421.10	2,311.15

[5] Minutes of the Federal Open Market Committee, July 30-31, 2013. See: http://www.federalreserve.gov/monetarypolicy/fomcminutes20130731.htm

[6] http://www.federalreserve.gov/econresdata/releases/stockstats/current.htm

Anxiety about "tapering," led to reactions such as this one reported in Bloomberg/Business Week: "U.S. stocks fell, giving the Dow Jones Industrial Average its longest slump in 13 months, as minutes of the Federal Reserve's July meeting showed officials support stimulus cuts this year if the economy improves."[7] The market is beginning to react and to place prices on the consequences of gradual Federal Reserve withdrawal from its current policies. While the Federal Reserve may not initiate the Taper on any set schedule, there is little doubt that the change is coming and investors in the stock market believe it is coming.

The sequestration of this spring and the stalemate in Congress's budgeting and appropriations of September 30, 2013, stand nominally as budgetary issues, but are effectively fiscal, monetary, and macroeconomic policies. The impact of these policies would appear to affect the credit of the United States and, possibly, of U.S. bonds. Standard & Poor's has issued a statement, however, that does not anticipate any immediate increase in bond rates nor a decrease in the credit rating of the United States Government.[8] Interestingly, this statement anticipated both the budgetary stalemate and the delay in tapering recently announced by Federal Reserve Chairman Benjamin Bernanke (Exhibit DHC-14a). The statement by Standard & Poor's came out on July 22, 2013 and was re-released on September 30, 2013. That such an analysis exists and that it anticipated the current deadlock by two months suggests that

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[7] Bloomberg News, "U.S. Stocks Fall as Fed Minutes Show Support for Tapering," by Lu Wang and Alex Barinka August 21, 2013. http://www.businessweek.com/news/2013-08-21/u-dot-s-dot-stock-index-futures-decline-before-federal-reserve-minutes

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[8] https://www.globalcreditportal.com/ratingsdirect/renderArticle.do?articleId=1164747&SctArtId=170085&from=CM&nsl_code=LIME

This page was accessed through "The Debt Ceiling Debate Is Unlikely To Change The U.S. Sovereign Rating" at: https://ratings.standardandpoors.com/governments/sovereign/US-Rating.html?elq=56690c9665ff40c7a46ab1d0310b84a1 bond markets and stock markets have already priced in the recent events. Some pulling back from recent upticks in bond rates (Exhibit DHC-11, p. 2 of 3) accompanied the surprise announcement that the Federal Reserve would not initiate the "Taper," the slowing of bond purchases,

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Carolina Water Service, Inc.

Earnings per Share -- Historical Data

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$ per share

COMPANIES \ YEARS	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013*
American States Water	$0.67	$0.67	$0.39	$0.53	$0.66	$0.67	$0.81	$0.78	$0.81	$1.11	$1.12	$1.41	$1.50
American Water Works								$1.10	$1.25	$1.53	$1.72	$2.11	$2.20
Aqua America	$0.41	$0.43	$0.46	$0.51	$0.57	$0.56	$0.57	$0.58	$0.62	$0.72	$0.83	$0.87	$1.15
Artesian Resources		$0.76	$0.64	$0.72	$0.81	$0.97	$0.90	$0.86	$0.97	$1.00	$0.83	$1.13	$1.05
California Water	$0.47	$0.63	$0.61	$0.73	$0.74	$0.67	$0.75	$0.95	$0.98	$0.91	$0.86	$1.02	$0.80
Connecticut Water Service	$1.13	$1.12	$1.15	$1.16	$0.88	$0.81	$1.05	$1.11	$1.19	$1.13	$1.13	$1.53	$1.60
Middlesex Water	$0.66	$0.73	$0.61	$0.73	$0.71	$0.82	$0.87	$0.89	$0.72	$0.96	$0.84	$0.90	$1.00
SJW Corp.	$0.77	$0.78	$0.91	$0.87	$1.12	$1.19	$1.04	$1.08	$0.81	$0.84	$1.11	$1.18	$1.30
York Water Co.	$0.43	$0.40	$0.47	$0.49	$0.56	$0.58	$0.57	$0.57	$0.64	$0.71	$0.71	$0.72	$0.75

Source: Value Line, Exhibit DHC-9

*Note: *2013 numbers are part actuals, part estimates*

Ratios of Change over Previous Year

COMPANIES \ YEARS	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013*
American States Water	1.00	0.58	1.36	1.25	1.02	1.21	0.96	1.04	1.37	1.01	1.26	1.06
American Water Works								1.14	1.22	1.12	1.23	1.04
Aqua America	1.05	1.07	1.11	1.12	0.98	1.02	1.02	1.07	1.16	1.15	1.05	1.32
Artesian Resources		0.84	1.13	1.13	1.20	0.93	0.96	1.13	1.03	0.83	1.36	0.93
California Water	1.34	0.97	1.20	1.01	0.91	1.12	1.27	1.03	0.93	0.95	1.19	0.78
Connecticut Water Service	0.99	1.03	1.01	0.76	0.92	1.30	1.06	1.07	0.95	1.00	1.35	1.05
Middlesex Water	1.11	0.84	1.20	0.97	1.15	1.06	1.02	0.81	1.33	0.88	1.07	1.11
SJW Corp.	1.01	1.17	0.96	1.29	1.06	0.87	1.04	0.75	1.04	1.32	1.06	1.10
York Water Co.	0.92	1.18	1.04	1.14	1.04	0.98	1.00	1.12	1.11	1.00	1.01	1.04

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COMPANIES	10-yr Averages Compound	10-yr Averages Simple	5-yr. Averages Compound	5-yr. Averages Simple	3-Yr. Averages Compound	3-Yr. Averages Simple	Average of Period Averages
American States Water	14.42%	15.32%	13.97%	14.81%	10.56%	11.06%	
American Water Works			14.87%	15.08%	12.87%	13.12%	
Aqua America	9.60%	9.97%	14.67%	15.06%	16.89%	17.43%	
Artesian Resources	5.08%	6.10%	4.07%	5.59%	1.64%	4.02%	
California Water	2.75%	3.77%	-3.38%	-2.49%	-4.20%	-2.82%	
Connecticut Water Service	3.36%	4.63%	7.59%	8.43%	12.29%	13.32%	
Middlesex Water	5.07%	6.08%	2.36%	4.00%	1.37%	1.92%	
SJW Corp.	3.63%	4.92%	3.78%	5.46%	15.67%	16.21%	
York Water Co.	4.78%	4.92%	5.64%	5.76%	1.84%	1.86%	
Means	6.09%	6.96%	7.06%	7.97%	7.66%	8.46%	
Medians	4.93%	5.50%	5.64%	5.76%	10.56%	11.06%	
Average of Mean & Median		5.87%		6.61%		9.43%	7.30%

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	Value Line*					
COMPANIES	$'s	%'s	Zacks‡	Yahoo†	Reuters	
American States Water	1.70	3.64%	2.00%	2.00%	2.00%	
American Water Works	2.90	8.21%	7.16%	7.45%	8.56%	
Aqua America	1.45	6.85%	5.27%	5.80%	7.40%	
Artesian Resources	1.23	17.14%	17.14%	4.00%	17.14%	
California Water	1.35	16.13%	6.00%	6.00%	29.41%	
Connecticut Water Service	1.80	3.42%	5.00%	5.00%	5.00%	
Middlesex Water	1.15	4.07%	2.04%	2.70%	2.02%	
SJW Corp.	1.60	6.11%	3.70%	14.00%	3.70%	
York Water Co.	0.90	5.35%	14.10%	4.90%	14.29%	
Mean		7.88%	6.93%	5.76%	9.95%	
Median		6.11%	5.27%	5.00%	7.40%	*Average of Estimates*
Average of Mean & Median		**7.00%**	**6.10%**	**5.38%**	**8.67%**	**6.79%**

**Value Line, see Exhibit DHC-9; % =Compound Annual Growth Rate*
† "Yahoo"=Yahoo!Finance web site ‡ "Zacks"=Zacks web site

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$ per share

COMPANIES \ YEARS	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
American States Water	$7.02	$6.98	$7.51	$7.86	$8.32	$8.77	$8.97	$9.70	$10.13	$10.84	$11.80	$11.85
American Water Works							$25.64	$22.91	$23.59	$24.11	$25.10	$26.40
Aqua America	$3.49	$4.27	$4.71	$5.04	$5.57	$5.85	$6.26	$6.50	$6.81	$7.21	$7.90	$8.90
Artesian Resources	$9.65	$9.01	$9.26	$9.60	$10.15	$11.66	$11.86	$12.15	$12.44	$13.12	$13.57	
California Water	$6.56	$7.22	$7.83	$7.90	$9.07	$9.25	$9.72	$10.13	$10.45	$10.76	$11.28	$13.40
Connecticut Water Service	$10.06	$10.46	$10.94	$11.52	$11.60	$11.95	$12.23	$12.67	$13.05	$13.50	$16.89	$17.25
Middlesex Water	$7.39	$7.60	$8.02	$8.26	$9.52	$10.05	$10.03	$10.33	$11.13	$11.27	$11.48	$11.75
SJW Corp.	$8.40	$9.11	$10.11	$10.72	$12.48	$12.90	$13.99	$13.66	$13.75	$14.20	$14.71	$15.40
York Water Co.	$3.90	$4.06	$4.65	$4.85	$5.84	$5.97	$6.14	$6.92	$7.19	$7.45	$7.73	$8.05

Source: Value Line, Exhibit DHC-8

Ratios of Change over Previous Year

COMPANIES \ YEARS	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
American States Water	1.06	0.99	1.08	1.05	1.06	1.05	1.02	1.08	1.04	1.07	1.09	1.00
American Water Works								0.89	1.03	1.02	1.04	1.05
Aqua America	1.05	1.22	1.10	1.07	1.11	1.05	1.07	1.04	1.05	1.06	1.10	1.13
Artesian Resources		0.93	1.03	1.04	1.06	1.15	1.02	1.02	1.02	1.05	1.03	
California Water	1.01	1.10	1.08	1.01	1.15	1.02	1.05	1.04	1.03	1.03	1.05	1.19
Connecticut Water Service	1.09	1.04	1.05	1.05	1.01	1.03	1.02	1.04	1.03	1.03	1.25	1.02
Middlesex Water	1.04	1.03	1.06	1.03	1.15	1.06	1.00	1.03	1.08	1.01	1.02	1.02
SJW Corp.	1.03	1.08	1.11	1.06	1.16	1.03	1.08	0.98	1.01	1.03	1.04	1.05
York Water Co.	1.03	1.04	1.15	1.04	1.20	1.02	1.03	1.13	1.04	1.04	1.04	1.04

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Book Value per Share -- Historical Summary, Estimates & Overall Summary

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	10-yr Averages		5-yr. Averages		3-Yr. Averages		
COMPANIES	Compound	Simple	Compound	Simple	Compound	Simple	
American States Water	5.44%	5.47%	5.73%	5.77%	5.37%	5.43%	
American Water Works			0.59%	0.76%	3.82%	3.83%	
Aqua America	7.62%	7.66%	7.29%	7.34%	9.33%	9.37%	
Artesian Resources	3.46%	3.58%	3.08%	3.09%	3.77%	3.78%	
California Water	6.38%	6.52%	6.63%	6.79%	8.64%	8.86%	
Connecticut Water Service	5.13%	5.32%	7.12%	7.46%	9.75%	10.23%	
Middlesex Water	4.45%	4.53%	3.22%	3.24%	1.82%	1.82%	
SJW Corp.	5.39%	5.51%	1.94%	1.97%	3.85%	3.85%	
York Water Co.	7.08%	7.24%	5.57%	5.62%	3.84%	3.84%	
							Average of Period Averages
Means	5.62%	5.73%	4.57%	4.67%	5.58%	5.67%	
Medians	5.41%	5.49%	5.57%	5.62%	3.85%	3.85%	
Average of Mean & Median		5.56%		5.11%		4.74%	5.14%

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COMPANIES	Value Line*	
	$'s	%'s
American States Water	$14.25	5.41%
American Water Works	$30.00	3.72%
Aqua America	$11.50	7.60%
Artesian Resources		
California Water	$15.00	3.28%
Connecticut Water Service	$20.40	4.91%
Middlesex Water	$12.90	2.70%
SJW Corp.	$19.15	6.42%
York Water Co.	$8.60	1.91%
Mean		**4.49%**
Median		**4.49%**
Average of Mean & Median		**4.49%**

**Source: Exhibit DHC-9*

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Sales/Revenues -- Historical Data
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COMPANIES \ YEARS	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
American States Water	$212.70	$228.00	$236.20	$268.60	$301.40	$318.70	$361.00	$398.90	$419.30	$466.90	$480.00
American Water Works						$2,336.90	$2,440.70	$2,710.70	$2,666.20	$2,876.90	$2,960.00
Aqua America	$367.20	$442.00	$496.80	$533.50	$602.50	$627.00	$670.50	$726.10	$712.00	$757.80	$790.00
Artesian Resources	$36.30	$39.60	$45.30	$47.30	$52.50	$56.20	$60.90	$64.90	$65.10	$70.60	
California Water	$277.10	$315.60	$320.70	$334.70	$367.10	$410.30	$449.40	$460.40	$501.80	$560.00	$590.00
Connecticut Water Service	$47.10	$48.50	$47.50	$46.90	$59.00	$61.30	$59.40	$66.40	$69.40	$83.80	$95.00
Middlesex Water	$64.10	$71.00	$74.60	$81.10	$86.10	$91.00	$91.20	$102.70	$102.10	$110.40	$120.00
SJW Corp.	$149.70	$166.90	$180.10	$189.20	$206.60	$220.30	$216.10	$215.60	$239.00	$261.60	$285.00
York Water Co.	$20.90	$22.50	$26.80	$28.70	$31.40	$32.80	$37.00	$39.00	$40.60	$41.40	$43.00

Source: Value Line, Exhibit DHC-9

Ratios of Change over Previous Year

COMPANIES \ YEARS	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
American States Water	1.02	1.07	1.04	1.14	1.12	1.06	1.13	1.10	1.05	1.11	1.03
American Water Works							1.04	1.11	0.98	1.08	1.03
Aqua America	1.14	1.20	1.12	1.07	1.13	1.04	1.07	1.08	0.98	1.06	1.04
Artesian Resources	1.05	1.09	1.14	1.04	1.11	1.07	1.08	1.07	1.00	1.08	
California Water	1.05	1.14	1.02	1.04	1.10	1.12	1.10	1.02	1.09	1.12	1.05
Connecticut Water Service	1.03	1.03	0.98	0.99	1.26	1.04	0.97	1.12	1.05	1.21	1.13
Middlesex Water	1.04	1.11	1.05	1.09	1.06	1.06	1.00	1.13	0.99	1.08	1.09
SJW Corp.	1.03	1.11	1.08	1.05	1.09	1.07	0.98	1.00	1.11	1.09	1.09
York Water Co.	1.07	1.08	1.19	1.07	1.09	1.04	1.13	1.05	1.04	1.02	1.04

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	10-yr Averages		5-yr. Averages		3-Yr. Averages		
COMPANIES	Compound	Simple	Compound	Simple	Compound	Simple	
American States Water	8.48%	8.55%	8.54%	8.61%	6.36%	6.42%	
American Water Works			4.84%	4.93%	2.98%	3.05%	
Aqua America	7.96%	8.11%	4.73%	4.79%	2.85%	2.91%	
Artesian Resources	7.39%	7.45%	6.10%	6.15%	5.05%	5.11%	
California Water	7.85%	7.92%	7.54%	7.58%	8.62%	8.65%	
Connecticut Water Service	7.27%	7.67%	9.16%	9.46%	12.68%	12.88%	
Middlesex Water	6.47%	6.55%	5.69%	5.81%	5.33%	5.41%	
SJW Corp.	6.65%	6.74%	5.28%	5.42%	9.75%	9.75%	
York Water Co.	7.48%	7.59%	5.56%	5.63%	3.31%	3.31%	
Means	7.44%	7.57%	6.38%	6.49%	6.32%	6.39%	Period
Medians	7.44%	7.63%	5.69%	5.81%	5.33%	5.41%	Averages
Average of Mean & Median		7.52%		6.09%		5.86%	6.49%

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COMPANIES	Value Line* $'s	Value Line* %'s	Yahoo^	Zacks	
American States Water	560	4.50%	10.00%	9.16%	
American Water Works	3750	6.99%	5.20%	4.94%	
Aqua America	915	4.29%	4.30%	4.81%	
Artesian Resources			4.90%	5.07%	
California Water	800	9.09%	6.90%	7.37%	
Connecticut Water Service	135	10.56%	3.60%	12.16%	
Middlesex Water	155	7.59%	2.10%	5.26%	
SJW Corp.	375	8.16%	3.20%	4.91%	
York Water Co.	50	4.40%	8.00%	5.38%	
Mean		6.95%	5.36%	6.56%	*Average of*
Median		7.29%	4.90%	5.26%	*Estimates*
Average of Mean & Median		**7.12%**	**5.13%**	**5.91%**	**6.05%**

**Value Line provided $ figures, rather than % growth; % growth was calculated*
^ "Yahoo"=Yahoo!Finance web site; 1-year estimates

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Carolina Water Service, Inc..

DPS -- Historical Data

Docket #2013-275-WS

$ per share

COMPANIES \ YEARS	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
American States Water	$0.43	$0.44	$0.44	$0.44	$0.45	$0.46	$0.48	$0.50	$0.51	$0.52	$0.55	$0.64	$0.76
American Water Works								$0.80	$0.82	$0.86	$0.91	$0.96	$1.06
Aqua America	$0.24	$0.26	$0.28	$0.29	$0.32	$0.35	$0.38	$0.41	$0.44	$0.47	$0.50	$0.54	$0.58
Artesian Resources	$0.49	$0.52	$0.53	$0.55	$0.58	$0.61	$0.66	$0.71	$0.72	$0.75	$0.76	$0.79	$0.82
California Water	$0.56	$0.56	$0.56	$0.57	$0.57	$0.58	$0.58	$0.59	$0.59	$0.60	$0.62	$0.63	$0.64
Connecticut Water Service	$0.80	$0.81	$0.83	$0.84	$0.85	$0.86	$0.87	$0.88	$0.90	$0.92	$0.94	$0.96	$0.98
Middlesex Water	$0.62	$0.63	$0.65	$0.66	$0.67	$0.68	$0.69	$0.70	$0.71	$0.72	$0.73	$0.74	$0.80
SJW Corp.	$0.43	$0.46	$0.49	$0.51	$0.53	$0.57	$0.61	$0.65	$0.66	$0.68	$0.69	$0.71	$0.73
York Water Co.	$0.34	$0.35	$0.37	$0.39	$0.42	$0.45	$0.48	$0.49	$0.51	$0.52	$0.53	$0.54	$0.55

Note: American Water Works began paying dividends in mid-2008, after it became publicly traded; these are pro-rated to a full year. *Source: Exhibit DHC-9*

Ratios of Change over Previous Year

COMPANIES \ YEARS	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
American States Water	1.02	1.00	1.00	1.02	1.02	1.04	1.04	1.02	1.02	1.06	1.16	1.19
American Water Works								1.03	1.05	1.06	1.05	1.10
Aqua America	1.08	1.08	1.04	1.10	1.09	1.09	1.08	1.07	1.07	1.06	1.08	1.07
Artesian Resources	1.05	1.03	1.04	1.05	1.05	1.08	1.08	1.01	1.04	1.01	1.04	1.04
California Water	1.00	1.00	1.02	1.00	1.02	1.00	1.02	1.00	1.02	1.03	1.02	1.02
Connecticut Water Service	1.01	1.02	1.01	1.01	1.01	1.01	1.01	1.02	1.02	1.02	1.02	1.02
Middlesex Water	1.02	1.03	1.02	1.02	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.08
SJW Corp.	1.07	1.07	1.04	1.04	1.08	1.07	1.07	1.02	1.03	1.01	1.03	1.03
York Water Co.	1.03	1.06	1.05	1.08	1.07	1.07	1.02	1.04	1.02	1.02	1.01	1.03

Office of Regulatory Staff

Carolina Water Service, Inc.

DPS -- Historical Data Summary

Docket #2013-275-WS

	10-yr Averages		5-yr. Averages		3-Yr. Averages		
COMPANIES	Compound	Simple	Compound	Simple	Compound	Simple	
American States Water	5.62%	5.79%	8.73%	8.97%	13.48%	13.63%	
American Water Works			5.79%	5.82%	7.22%	7.24%	
Aqua America	7.55%	7.57%	7.18%	7.19%	7.26%	7.26%	
Artesian Resources	4.51%	4.53%	3.02%	3.03%	3.19%	3.19%	
California Water	1.34%	1.35%	1.64%	1.65%	2.17%	2.18%	
Connecticut Water Service	1.68%	1.68%	2.18%	2.18%	2.13%	2.13%	
Middlesex Water	2.10%	2.12%	2.71%	2.74%	3.57%	3.62%	
SJW Corp.	4.07%	4.09%	2.35%	2.35%	2.39%	2.40%	
York Water Co.	4.04%	4.07%	2.34%	2.34%	1.89%	1.89%	
Means	3.86%	3.90%	3.99%	4.03%	4.81%	4.84%	Period
Medians	4.06%	4.08%	2.71%	2.74%	3.19%	3.19%	Averages
Average of Mean & Median		3.97%		3.37%		4.01%	3.78%

Office of Regulatory Staff
Carolina Water Service, Inc.
DPS -- Estimates & Summary
Docket #2013-275-WS

COMPANIES	DPS Projection*	Compound %
American States Water	0.95	6.58%
American Water Works	1.40	8.27%
Aqua America	0.85	11.54%
Artesian Resources		
California Water	0.90	10.23%
Connecticut Water Service	1.11	3.62%
Middlesex Water	0.80	0.00%
SJW Corp.	0.90	6.16%
York Water Co.	0.65	4.89%
Mean		6.41%
Median		6.37%
Average of Mean & Median		**6.39%**

**Source: Exhibit DHC-9*

Office of Regulatory Staff
Carolina Water Service, Inc.
DCF Summary
Docket #2013-275-WS

Indicator	Historical	Projected	Average	Source
EPS	7.30%	6.79%	7.05%	Exhibit DHC-2
BVPS	5.14%	4.49%	4.81%	Exhibit DHC-3
Sales/Rev.	6.49%	6.05%	6.27%	Exhibit DHC-4
DPS	3.78%	6.39%	5.09%	Exhibit DHC-5
			5.81%	Calculated average/mean
			3.55%	Exhibits DHC-1, p.3 of 5, DHC-7, DHC-9, p. 10 of 10
			0.21%	Calculated, multiplication of above two lines
			9.56%	DCF Recommendation

Office of Regulatory Staff
Carolina Water Service, Inc.
DCF Proxy Group Characteristics
Docket #2013-275-WS

Company	Dividend Yield[1]	Market Cap'n[2]	β	Bond Rating
American States Water	3.10%	$1,000	0.70	A+
American Water Works	2.90%	$7,100	0.65	A-
Aqua America	2.60%	$4,200	0.60	A+ [3]
Artesian Resources	3.70%	$195	0.60	n/a
California Water	3.40%	$950	0.65	A+
Connecticut Water Service	3.20%	$350	0.75	A
Middlesex Water	3.70%	$325	0.70	A-
SJW Corp.	2.70%	$550	0.85	A [3]
York Water Co.	2.90%	$250	0.70	A-
Overall	**3.10%**		**0.70**	

Sources:

All columns except Credit Rating: Exhibit DHC-9

Bond Rating column from S&P online

Footnotes:

[1] Average Water Company Dividend Yield before reduction in capital gains = (3.5%+3.6%)/2; see Exhibit DHC-9, p. 10 of 10

[2] "Cap'n" = "Capitalization"; numbers are in $1,000,000's

[3] Ratings of Aqua Pennsylvania & San Jose Water Companies, respectively

Office of Regulatory Staff
Carolina Water Service, Inc.
CAP-M Calculation
Docket #2013-275-WS

Deciles of Company Size	Compound Annual Growth Rate (%)	Quarter in Blue Chip Forecast	30-Yr. Treasury Bond Rate
Largest:1	9.1		
2	10.4	3Q 2013	3.72
3	10.8	4Q 2013	3.70
4	10.8	1Q 2014	3.80
5	11.3	2Q 2014	3.90
6	11.3	3Q 2014	4.00
7	11.3	4Q 2014	4.10
8	11.5	**1Q 2015**	**4.20**
9	11.5		
Smallest: 10	13.0		
Overall	**11.1**		

K= $R_f + ((R_m - R_f) * \beta)$

K= 4.2+((11.1-4.2)*0.70)

K= **9.03**

Sources:

Long-Term stock returns Stocks, Bonds, Bills & Inflation, 2013 Yearbook, p.96

30-Year Treasury Bond projected interest rate: Blue Chip Financial Forecasts, October 1, 2013, p.2

β is from Exhibit DHC-7

AMER. STATES WATER NYSE-AWR

RECENT PRICE	P/E RATIO	RELATIVE P/E RATIO	DIV'D YLD
26.48	17.9 (Trailing: 17.4, Median: 22.0)	1.02	3.1%

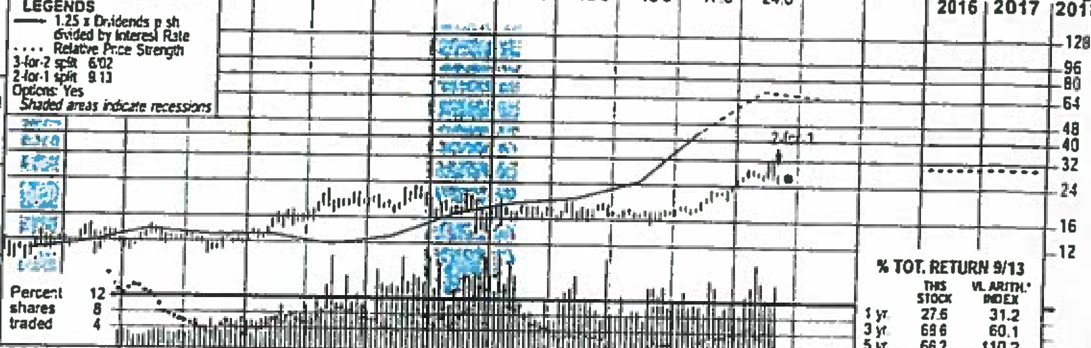
VALUE LINE

TIMELINESS	3	Lowered 8/16/13
SAFETY	2	Raised 7/20/12
TECHNICAL	3	Raised 8/23/13

BETA .70 (1.00 = Market)

High:	14.5	14.5	13.4	17.3	21.9	23.1	21.0	19.4	19.8	18.2	24.1	33.1
Low:	10.1	10.8	10.4	12.2	15.1	16.8	13.5	14.9	15.6	15.3	17.0	24.0

Target Price Range 2016 | 2017 | 2018



2016-18 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	40	(+50%)	14%
Low	30	(+15%)	7%

Insider Decisions

	N	D	J	F	M	A	M	J	J
to Buy	0	1	0	0	0	0	2	1	0
Options	1	1	1	0	0	1	4	4	0
to Sell	2	3	1	0	0	0	5	5	0

Institutional Decisions

	4Q2012	1Q2013	2Q2013
to Buy	77	93	98
to Sell	64	59	70
Hld's(000)	24066	24964	24268

% TOT. RETURN 9/13

	THIS STOCK	VL ARITH.* INDEX
1 yr.	27.6	31.2
3 yr.	69.6	60.1
5 yr.	66.2	110.2

1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	© VALUE LINE PUB. LLC	16-18
5.72	5.51	6.45	6.08	6.53	6.69	6.99	6.81	7.03	7.88	8.75	9.21	9.74	10.71	11.12	12.12	12.30	12.50	Revenues per sh	12.75
.92	1.02	1.13	1.10	1.26	1.27	1.04	1.11	1.32	1.45	1.65	1.69	1.70	2.11	2.13	2.48	2.60	2.65	"Cash Flow" per sh	3.20
.52	.54	.60	.64	.67	.67	.39	.53	.66	.67	.81	.73	.81	1.11	1.12	1.41	1.50	1.55	Earnings per sh A	1.70
.42	.42	.43	.43	.43	.44	.44	.44	.45	.46	.48	.50	.51	.52	.55	.64	.76	.83	Div'd Decl'd per sh B■	.95
1.29	1.56	2.15	1.51	1.59	1.34	1.88	2.51	2.12	1.95	1.45	2.23	2.09	2.12	2.13	1.77	2.15	2.20	Cap'l Spending per sh	2.10
5.62	5.74	5.91	6.37	6.61	7.02	6.98	7.51	7.86	8.32	8.77	8.97	9.70	10.13	10.84	11.80	11.85	12.50	Book Value per sh	14.25
26.87	26.87	26.87	30.24	30.24	30.36	30.42	33.50	33.60	34.10	34.46	34.60	37.06	37.26	37.70	38.53	39.00	40.00	Common Shs Outst'g C	44.00
14.5	15.5	17.1	15.9	16.7	18.3	31.9	23.2	21.9	27.7	24.0	22.6	21.2	15.7	15.4	14.3	Bold figures are Value Line estimates		Avg Ann'l P/E Ratio	19.5
.84	.81	.97	1.03	.86	1.00	1.82	1.23	1.17	1.50	1.27	1.36	1.41	1.00	.97	.91			Relative P/E Ratio	1.30
5.5%	5.0%	4.2%	4.2%	3.9%	3.6%	3.5%	3.6%	3.1%	2.5%	2.5%	2.9%	2.9%	3.0%	3.2%	3.1%			Avg Ann'l Div'd Yield	3.1%

2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014		16-18
212.7	223.0	236.2	268.6	301.4	318.7	361.0	398.9	419.3	466.9	480	500	Revenues ($mill)	560
11.9	16.5	22.5	23.1	29.0	26.8	29.5	41.4	42.0	54.1	58.0	60.0	Net Profit ($mill)	73.0
43.5%	37.4%	47.0%	40.5%	42.6%	37.8%	38.9%	43.2%	41.7%	39.9%	40.0%	40.0%	Income Tax Rate	40.0%
--	--	--	12.2%	8.5%	6.9%	3.2%	5.8%	2.0%	2.5%	2.5%	2.5%	AFUDC % to Net Profit	2.5%
52.0%	47.7%	53.4%	48.6%	46.9%	46.2%	45.9%	44.3%	45.4%	42.2%	43.0%	43.0%	Long-Term Debt Ratio	43.0%
48.0%	52.3%	46.6%	51.4%	53.1%	53.8%	54.1%	55.7%	54.6%	57.8%	57.0%	57.0%	Common Equity Ratio	57.0%
442.3	480.4	532.5	551.6	569.4	577.0	665.0	677.4	749.1	787.0	805	875	Total Capital ($mill)	1025
602.3	664.2	713.2	750.6	776.4	825.3	866.4	855.0	896.5	917.8	940	985	Net Plant ($mill)	1100
4.6%	5.2%	5.4%	6.0%	6.7%	6.4%	5.9%	7.6%	7.1%	8.3%	7.0%	7.0%	Return on Total Cap'l	6.5%
5.6%	6.6%	8.5%	8.1%	9.3%	8.6%	8.2%	11.0%	10.3%	11.9%	12.5%	12.0%	Return on Shr. Equity	11.5%
5.6%	6.6%	8.5%	8.1%	9.3%	8.6%	8.2%	11.0%	10.3%	11.9%	12.5%	12.0%	Return on Com Equity	11.5%
NMF	1.0%	2.8%	2.7%	3.9%	3.1%	3.2%	5.8%	5.3%	6.6%	6.0%	6.0%	Retained to Com Eq	5.0%
113%	84%	67%	67%	58%	64%	61%	47%	49%	45%	51%	54%	All Div'ds to Net Prof	56%

CAPITAL STRUCTURE as of 6/30/13
Total Debt $335.8 mill. Due in 5 Yrs $10.6 mill.
LT Debt $332.4 mill. LT Interest $8.0 mill.
(LT interest earned: 5.2x; total interest coverage: 4.9x) (42% of Cap'l)

Leases, Uncapitalized: Annual rentals $3.0 mill.

Pension Assets-12/12 $107.6 mill. Oblig. $163.2 mill.

Pfd Stock None.

Common Stock 38,688,604 shs. as of 8/6/13 *(Reflects 2-for-1 stock split paid 9/3/13.)*

MARKET CAP: $1.0 billion (Mid Cap)

CURRENT POSITION ($MILL.)	2011	2012	6/30/13
Cash Assets	1.3	23.5	8.5
Other	164.3	160.5	172.6
Current Assets	165.6	184.0	181.1
Accts Payable	37.9	40.6	55.2
Debt Due	.3	3.3	3.4
Other	66.2	49.8	43.8
Current Liab.	104.4	93.7	102.4
Fix. Chg. Cov.	401%	442%	450%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '10-'12 to '16-'18
Revenues	5.5%	7.5%	2.0%
"Cash Flow"	6.5%	9.0%	6.0%
Earnings	6.5%	11.5%	6.0%
Dividends	3.0%	4.5%	9.0%
Book Value	5.0%	5.5%	2.0%

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2010	88.4	95.5	111.3	103.7	398.9
2011	94.3	109.8	119.9	95.3	419.3
2012	107.6	114.3	133.5	111.5	466.9
2013	110.5	120.7	135	113.8	480
2014	115	125	140	120	500

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2010	.23	.24	.31	.33	1.11
2011	.19	.34	.42	.17	1.12
2012	.27	.40	.49	.26	1.41
2013	.35	.43	.48	.24	1.50
2014	.33	.42	.55	.30	1.60

Cal-endar	QUARTERLY DIVIDENDS PAID B■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2009	.125	.125	.125	.13	.51
2010	.13	.13	.13	.13	.52
2011	.13	.14	.14	.14	.55
2012	.14	.14	.178	.178	.64
2013	.178	.178	.203		

BUSINESS: American States Water Co. operates as a holding company. Through its principal subsidiary, Golden State Water Company, it supplies water to more than 250,000 customers in 75 communities in 10 counties. Service areas include the greater metropolitan areas of Los Angeles and Orange Counties. The company also provides electric utility services to nearly 23,250 customers in the city of Big Bear Lake and in areas of San Bernardino County. Sold Chaparral City Water of Arizona (6/11). Has 728 employees. Officers & directors own 2.9% of common stock (4/12 Proxy). Chairman: Lloyd Ross. President & CEO: Robert J. Sprowls. Inc: CA. Addr: 630 East Foothill Boulevard, San Dimas, CA 91773. Tel: 909-394-3600. Internet: www.aswater.com.

Nonutility operations are a key component of American States Water. Last year, its nonregulated subsidiary, American States Utilities Services (ASUS), accounted for $0.39 a share, or 28% of the company's share net. This percentage was easily the highest among the eight water utilities that *Value Line* follows.

Estimating future profits from these businesses will be more difficult in the years ahead. The core of the ASUS profits has come from operating and maintaining water services at eight U.S. military bases. Some analysts on Wall Street believe that 2012 was perhaps the peak earnings year for ASUS, but we think that these projections are conservative. True, the company's backlog of new projects isn't large. However, with a substantial number of military facilities yet to be privatized, we believe that ASUS' good reputation with the Department of Defense will greatly help it win a fair share of future contracts. Thus, we think earnings of between $0.40 a share and $0.50 a share from this segment are attainable to the 2016-2018 pull. Since winning contracts is less predictable than its core business, American States earnings might experience greater swings than in the past.

Meanwhile, core regulated operations are doing fine. Due mostly TO a recent rate increase granted to Golden State Water (the main water utility), earnings growth should be somewhere in the 5%-7% range. Indeed,

We're raising our earnings projections again. For the second straight quarter, American States share net exceeded expectations in the June period. As a result, we are nudging the company's earnings-per-share estimates higher by $0.05 in 2013, and $0.10 in 2014, respectively. *(Please note that all figures on the page have been changed to reflect the two-for-one stock split paid on September 3rd.)*

American States' shares offer slightly better-than-average potential long-term returns for a water utility. The current yield is typical for the industry, but dividend growth prospects are higher than the group norm. Moreover, the company is the third-largest water utility we follow, and is the only one that rates an A Financial Strength Rating.

James A. Flood *October 18, 2013*

(A) Primary earnings. Excludes nonrecurring gains/(losses): '04, 7¢; '05, 13¢; '06, 3¢; '08, (14¢); '10, (23¢) '11, 10¢. Next earnings report due early November. Quarterly egs. may not add due to rounding.
(B) Dividends historically paid in early March, June, September, and December. ■ Div'd reinvestment plan available.
(C) In millions, adjusted for splits.

Company's Financial Strength	A
Stock's Price Stability	90
Price Growth Persistence	75
Earnings Predictability	90

AMERICAN WATER NYSE-AWK

RECENT PRICE 40.09 | P/E RATIO 18.0 (Trailing: 19.5; Median: NMF) | RELATIVE P/E RATIO 1.02 | DIV'D YLD 2.9% | VALUE LINE

TIMELINESS 3 Raised 10/4/13
SAFETY 3 New 7/25/08
TECHNICAL 3 Lowered 8/9/13
BETA .65 (1.00 = Market)

	2008	2009	2010	2011	2012	2013
High:	23.7	23.0	25.8	32.8	39.4	43.7
Low:	16.5	16.2	19.4	25.2	31.3	37.0

2016-18 PROJECTIONS

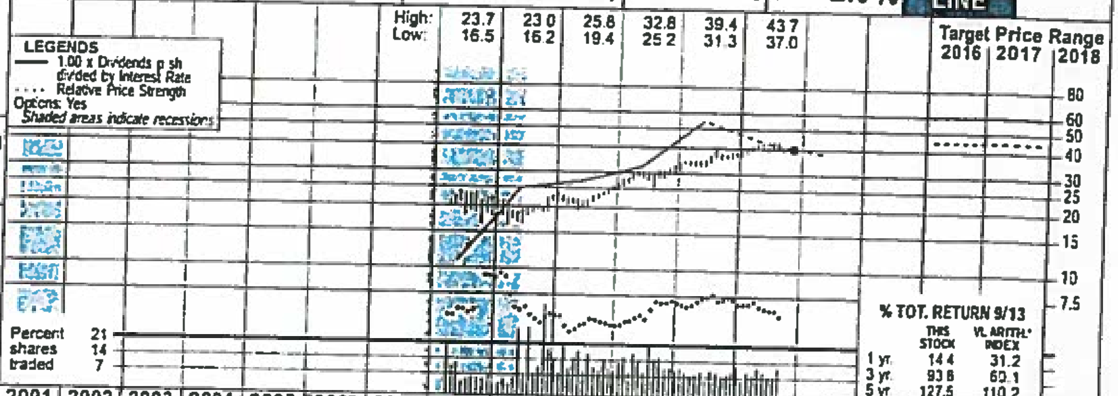
	Price	Gain	Ann'l Total Return
High	60	(+50%)	13%
Low	45	(+10%)	6%

Insider Decisions

	N	D	J	F	M	A	M	J	J
to Buy	0	0	0	0	0	0	0	0	0
Options	4	0	0	0	8	0	3	0	0
to Sell	4	0	0	0	8	0	3	0	0

Institutional Decisions

	4Q2012	1Q2013	2Q2013
to Buy	188	191	165
to Sell	175	186	209
Hld's(000)	146609	145912	144834



1997	1998	1999	2000	2001	2002	2003	2004	2005	2006E	2007	2008	2009	2010	2011	2012	2013	2014	© VALUE LINE PUB. LLC	16-18
--	--	--	--	--	--	--	--	--	13.08	13.84	14.61	13.98	15.49	15.18	16.25	*16.60*	*17.50*	Revenues per sh	*20.25*
--	--	--	--	--	--	--	--	--	.65	d.47	2.87	2.89	3.56	3.73	4.27	*4.45*	*4.70*	"Cash Flow" per sh	*5.25*
--	--	--	--	--	--	--	--	--	d.97	d2.14	1.10	1.25	1.53	1.72	2.11	*2.20*	*2.40*	Earnings per sh A	*2.90*
--	--	--	--	--	--	--	--	--	--	--	.40	.82	.86	.91	.96	*1.06*	*1.20*	Div'd Decl'd per sh B■	*1.40*
--	--	--	--	--	--	--	--	--	4.31	4.74	6.31	4.50	4.38	5.27	5.25	*5.35*	*5.35*	Cap'l Spending per sh	*5.50*
--	--	--	--	--	--	--	--	--	23.86	25.39	25.64	22.91	23.59	24.11	25.10	*26.40*	*27.50*	Book Value per sh D	*30.00*
--	--	--	--	--	--	--	--	--	160.00	160.00	160.00	174.63	175.00	175.66	176.99	*178.50*	*180.00*	Common Shs Outst'g C	*185.00*
--	--	--	--	--	--	--	--	--	--	--	18.9	15.6	14.6	16.8	16.7	*Bold figures are Value Line estimates*		Avg Ann'l P/E Ratio	*18.5*
--	--	--	--	--	--	--	--	--	--	--	1.14	1.04	.93	1.05	1.07			Relative P/E Ratio	*1.25*
--	--	--	--	--	--	--	--	--	--	--	1.9%	4.2%	3.8%	3.1%	2.7%			Avg Ann'l Div'd Yield	*2.7%*
						--	--	--	2093.1	2214.2	2336.9	2440.7	2710.7	2666.2	2876.9	*2960*	*3150*	Revenues ($mill)	*3750*
						--	--	--	d155.8	d342.3	187.2	209.9	267.8	304.9	375.0	*390*	*430*	Net Profit ($mill)	*535*
						--	--	--	--	--	37.4%	37.9%	43.4%	39.5%	40.7%	*40.0%*	*40.0%*	Income Tax Rate	*40.0%*
						--	--	--	--	--	--	--	--	12.5%	6.2%	*8.0%*	*10.0%*	AFUDC % to Net Profit	*12.0%*
						--	--	--	56.1%	50.9%	53.1%	56.9%	56.8%	55.7%	53.8%	*54.0%*	*54.0%*	Long-Term Debt Ratio	*54.5%*
						--	--	--	43.9%	49.1%	46.9%	43.1%	43.2%	44.2%	46.0%	*46.0%*	*46.0%*	Common Equity Ratio	*45.5%*
						--	--	--	8692.8	9245.7	8750.2	9283.0	9561.3	9580.3	9652.7	*10300*	*10800*	Total Capital ($mill)	*11800*
						--	--	--	8720.6	9318.0	9991.8	10524	11059	11021	11739	*12300*	*12800*	Net Plant ($mill)	*14200*
						--	--	--	NMF	NMF	3.7%	3.8%	4.4%	4.8%	5.5%	*5.5%*	*5.5%*	Return on Total Cap'l	*6.0%*
						--	--	--	NMF	NMF	4.6%	5.2%	6.5%	7.2%	8.4%	*8.0%*	*8.5%*	Return on Shr. Equity	*9.5%*
						--	--	--	NMF	NMF	4.6%	5.2%	6.5%	7.2%	8.4%	*8.0%*	*8.5%*	Return on Com Equity	*9.5%*
						--	--	--	NMF	NMF	3.0%	1.8%	2.8%	3.5%	4.6%	*4.5%*	*4.5%*	Retained to Com Eq	*4.5%*
						--	--	--	--	--	34%	65%	56%	52%	45%	*48%*	*50%*	All Div'ds to Net Prof	*50%*

CAPITAL STRUCTURE as of 6/30/13
Total Debt $5761.0 mill. Due in 5 Yrs $1034.0 mill.
LT Debt $5180.7 mill. LT Interest $301.0 mill.
(Total interest coverage: 4.4x) (53% of Cap'l)

Leases, Uncapitalized: Annual rentals $28.1 mill.
Pension Assets $1157.7 mill. Oblig. $1621.2 mill.
Pfd Stock $17.6 mill. Pfd Div'd 5.7 mill.

Common Stock 177,964,133 shs. as of 8/1/13

MARKET CAP: $7.1 billion (Large Cap)

CURRENT POSITION ($MILL.)	2011	2012	6/30/13
Cash Assets	14.2	24.4	20.4
Other	1383.5	475.0	525.4
Current Assets	1397.7	499.4	545.8
Accts Payable	243.7	279.6	178.4
Debt Due	543.9	385.9	580.3
Other	701.5	329.3	290.6
Current Liab.	1489.1	994.8	1049.3
Fix. Chg. Cov.	256%	292%	*300%*

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '10-'12 to '16-'18
Revenues	--	3.0%	*5.0%*
"Cash Flow"	--	NMF	*6.5%*
Earnings	--	--	*10.0%*
Dividends	--	--	*9.0%*
Book Value	--	-1.5%	*4.5%*

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2010	588.1	671.2	786.9	664.5	2710.7
2011	596.7	668.8	760.9	639.8	2666.2
2012	618.7	745.6	831.8	680.8	2876.9
2013	636.1	724.3	*890*	*709.6*	*2960*
2014	*670*	*775*	*945*	*760*	*3150*

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2010	.18	.42	.71	.23	1.53
2011	.23	.42	.73	.32	1.72
2012	.28	.66	.87	.30	2.11
2013	.32	.57	*.90*	*.41*	*2.20*
2014	*.35*	*.65*	*1.00*	*.40*	*2.40*

Cal-endar	QUARTERLY DIVIDENDS PAID B■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2009	.20	.20	.21	.21	.82
2010	.21	.21	.22	.22	.86
2011	.22	.23	.23	.23	.91
2012	.23	.23	.25	.25	.96
2013	.25	.25	.28		

BUSINESS: American Water Works Company, Inc. is the largest investor-owned water and wastewater utility in the U.S., providing services to over 14 million people in over 30 states and Canada. It's nonregulated business assists municipalities and military bases with the maintenance and upkeep as well. Regulated operations made up 89.1% of 2012 revenues. New Jersey is its biggest market accounting for 22.2% of revenues. Has roughly 7,000 employees. Depreciation rate, 2.6% in '12. BlackRock, Inc., owns 10.3% of the common stock outstanding. Off. & dir. own less than 1% (3/13 Proxy). President & CEO: Jeffry Sterba. Chairman: George Mackenzie. Address: 1025 Laurel Oak Road, Voorhees, NJ 08043. Telephone: 856-346-8200. Internet: www.amwater.com.

American Water Works continues to do a good job of staying on the right side of regulators. The company must contend with 30 different state regulatory commissions in order to recoup the large sums that it is investing in its individual water systems located throughout the country. The utility's basic formula for success in dealing with regulators has been to keep costs low. This feat has been achieved by improving operating margins and continually reducing expense ratios, a trend we expect to continue. Indeed, effective cost containment makes it much more difficult for state commissions to deny much needed rate increases.

Expansion via acquisitions will remain a key element to American Water's long-term growth. The company should continue to scoop up some of the small water utilities that cash-strapped municipalities are willing to sell. Sixteen purchases were made last year and 10 have already been completed so far in 2013. It is American Water's expertise in integrating these new entities into its existing operations and reducing overhead that is behind its leaner cost structure.

American Water's construction budget should be large but manageable. Capital expenditures will probably be close to $1 billion a year over the next 3- to 5-year period, due to the need to upgrade and repair the company's aging infrastructure. Internally generated funds will probably cover only about 75% of the outlays over this time frame. As a result, American Water will most likely have to issue more debt to make up the difference.

American Water's earnings and dividend growth prospects are good. The combination of efficient operations, inorganic growth, and greater contributions from nonutility businesses should enable annual earnings and dividend increases in the 7% to 10% range (versus about 5% for the industry) for the foreseeable future.

Long-term, income-oriented investors might like these shares. The yield on AWK's stock is close to the industry norm, yet its dividend growth prospects are well above-average. So, even though the stock is currently not timely, it still holds more appeal than most water utilities to the pull to 2016-2018.

James A. Flood *October 18, 2013*

(A) Diluted earnings. Excludes nonrecurring losses: '08, $4.62; '09, $2.63; '11, $0.07. Discontinued operations: '06, (4¢); '11, 3¢; '12, (10¢). Next earnings report due late October. Quarterly earnings may not sum due to rounding. (B) Dividends paid in March, June, September, and December. ■ Div. reinvestment available. (C) In millions. (D) Includes intangibles. In 2012: $1.207 billion, $6.82/share. (E) Pro forma numbers for '06 & '07.

Company's Financial Strength	B+
Stock's Price Stability	95
Price Growth Persistence	90
Earnings Predictability	20

AQUA AMERICA NYSE-WTR

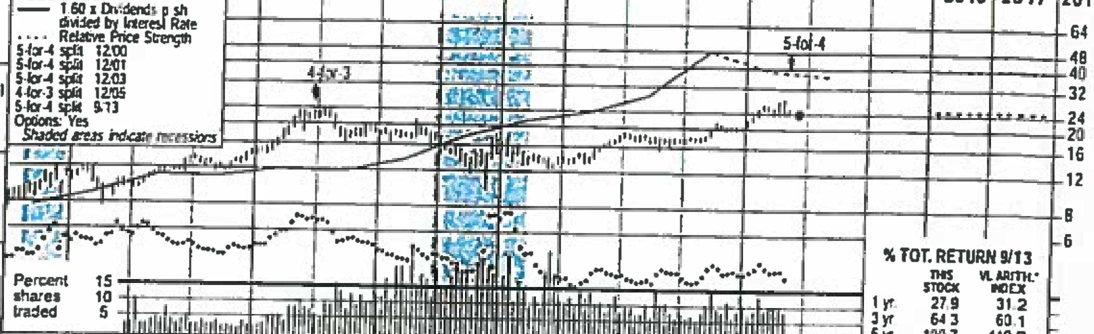
RECENT PRICE 23.97 | P/E RATIO 20.3 (Trailing: 22.7 / Median: 24.0) | RELATIVE P/E RATIO 1.15 | DIV'D YLD 2.6% | VALUE LINE

TIMELINESS 3 Lowered 5/24/13
SAFETY 2 Raised 4/20/12
TECHNICAL 3 Raised 9/13/13
BETA .60 (1.00 = Market)

High:	12.0	13.4	14.8	23.4	23.8	21.3	17.6	17.2	18.4	19.0	21.5	28.1
Low:	7.7	9.5	11.3	14.0	16.1	15.1	9.8	12.3	13.2	15.4	16.8	20.6

Target Price Range 2016 | 2017 | 2018

LEGENDS
— 1.60 x Dividends p sh divided by Interest Rate
.... Relative Price Strength
5-for-4 split 12/00
5-for-4 split 12/01
5-for-4 split 12/03
4-for-3 split 12/05
5-for-4 split 9/13
Options: Yes
Shaded areas indicate recessions



2016-18 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	40	(+65%)	19%
Low	25	(+5%)	4%

Insider Decisions

	N	D	J	F	M	A	M	J	J
to Buy	0	0	0	0	0	0	0	0	0
Options	0	1	3	2	2	0	0	1	3
to Sell	0	0	2	0	0	0	0	2	0

Institutional Decisions

	4Q2012	1Q2013	2Q2013
to Buy	118	136	141
to Sell	117	116	130
Hld's(000)	83977	82403	82501

% TOT. RETURN 9/13

	THIS STOCK	VL ARITH.* INDEX
1 yr.	27.9	31.2
3 yr.	64.3	60.1
5 yr.	100.7	110.2

1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	© VALUE LINE PUB. LLC	16-18
1.61	1.67	1.93	1.97	2.16	2.28	2.38	2.78	3.08	3.23	3.61	3.71	3.93	4.21	4.10	4.32	*4.45*	*4.60*	Revenues per sh	*4.95*
.45	.49	.58	.61	.69	.76	.77	.87	.97	1.01	1.10	1.14	1.29	1.42	1.45	1.51	*1.60*	*1.70*	"Cash Flow" per sh	*1.85*
.27	.32	.33	.37	.41	.43	.46	.51	.57	.56	.57	.58	.62	.72	.83	.87	*1.15*	*1.25*	Earnings per sh A	*1.45*
.19	.20	.22	.23	.24	.26	.28	.29	.32	.35	.38	.41	.44	.47	.50	.54	*.58*	*.64*	Div'd Decl'd per sh B ■	*.85*
.46	.65	.72	.93	.87	.98	1.06	1.23	1.47	1.64	1.43	1.58	1.66	1.89	1.90	1.98	*2.15*	*2.15*	Cap'l Spending per sh	*2.15*
2.27	2.57	2.74	3.08	3.32	3.49	4.27	4.71	5.04	5.57	5.85	6.26	6.50	6.81	7.21	7.90	*8.90*	*9.60*	Book Value per sh	*11.50*
84.33	90.25	133.50	139.78	142.47	141.49	154.31	158.97	161.21	165.41	166.75	169.21	170.61	172.46	173.60	175.43	*177.50*	*179.50*	Common Shs Outst'g C	*184.00*
17.8	22.5	21.2	18.2	23.6	23.6	24.5	25.1	31.8	34.7	32.0	24.9	23.1	21.1	21.3	21.9	***Bold figures are Value Line estimates***		Avg Ann'l P/E Ratio	*22.5*
1.03	1.17	1.21	1.18	1.21	1.29	1.40	1.33	1.69	1.87	1.70	1.50	1.54	1.34	1.34	1.40			Relative P/E Ratio	*1.50*
3.9%	2.9%	3.0%	3.3%	2.5%	2.5%	2.5%	2.3%	1.8%	1.8%	2.1%	2.8%	3.1%	3.1%	2.8%	2.8%			Avg Ann'l Div'd Yield	*2.6%*
						367.2	442.0	496.8	533.5	602.5	627.0	670.5	726.1	712.0	757.8	*790*	*830*	Revenues ($mill)	*915*
						67.3	80.0	91.2	92.0	95.0	97.9	104.4	124.0	144.8	153.1	*205*	*225*	Net Profit ($mill)	*265*
						39.3%	39.4%	38.4%	39.6%	38.9%	39.7%	39.4%	39.2%	32.9%	39.0%	*40.0%*	*40.0%*	Income Tax Rate	*40.0%*
						--	--	--	--	--	--	--	--	2.9%	3.1%	*3.0%*	*3.0%*	AFUDC % to Net Profit	*2.0%*
						51.4%	50.0%	52.0%	51.6%	55.4%	54.1%	55.6%	56.6%	52.7%	52.7%	*50.0%*	*50.0%*	Long-Term Debt Ratio	*50.0%*
						48.6%	50.0%	48.0%	48.4%	44.6%	45.9%	44.4%	43.4%	47.3%	47.3%	*50.0%*	*50.0%*	Common Equity Ratio	*50.0%*
						1355.7	1497.3	1690.4	1904.4	2191.4	2306.6	2495.5	2706.2	2646.8	2929.7	*3150*	*3450*	Total Capital ($mill)	*4230*
						1824.3	2069.8	2280.0	2505.0	2792.8	2997.4	3227.3	3469.3	3612.9	3936.2	*4150*	*4350*	Net Plant ($mill)	*4900*
						6.4%	6.7%	6.9%	6.4%	5.9%	5.7%	5.6%	5.9%	6.9%	6.6%	*6.0%*	*6.0%*	Return on Total Cap'l	*6.5%*
						10.2%	10.7%	11.2%	10.0%	9.7%	9.3%	9.4%	10.6%	11.6%	11.0%	*12.0%*	*12.0%*	Return on Shr. Equity	*12.5%*
						10.2%	10.7%	11.2%	10.0%	9.7%	9.3%	9.4%	10.6%	11.6%	11.0%	*12.0%*	*12.0%*	Return on Com Equity	*12.5%*
						4.2%	4.6%	4.9%	3.7%	3.2%	2.8%	2.7%	3.7%	4.6%	4.3%	*6.0%*	*6.0%*	Retained to Com Eq	*5.0%*
						59%	57%	56%	63%	67%	70%	72%	65%	60%	61%	*52%*	*52%*	All Div'ds to Net Prof	*59%*

CAPITAL STRUCTURE as of 6/30/13
Total Debt $1648.4 mill. Due in 5 Yrs $368.3 mill.
LT Debt $1489.8 mill. LT Interest $60.0 mill.
(LT interest earned: 5.0x; total interest coverage: 4.1x) (51% of Cap'l)
Pension Assets-12/12 $190.1 mill. Oblig. $303.1 mill.
Pfd Stock None
Common Stock 176,463,469 shares as of 7/26/13 *(Reflects 5-for-4 stock split paid 9/1/13.)*
MARKET CAP: $4.2 billion (Mid Cap)

CURRENT POSITION ($MILL.)	2011	2012	6/30/13
Cash Assets	8.2	5.5	4.3
Receivables	81.1	92.9	98.3
Inventory (AvgCst)	11.2	11.8	12.5
Other	220.0	150.7	106.5
Current Assets	320.5	260.9	221.6
Accts Payable	68.3	55.5	47.0
Debt Due	80.4	125.4	158.6
Other	277.0	93.3	101.1
Current Liab.	425.7	274.2	306.7
Fix. Chg. Cov.	367%	398%	398%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '10-'12 to '16-'18
Revenues	8.0%	7.5%	*3.5%*
"Cash Flow"	8.5%	8.0%	*4.5%*
Earnings	6.5%	4.5%	*8.0%*
Dividends	7.5%	8.0%	*8.0%*
Book Value	9.0%	7.0%	*6.5%*

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2010	160.5	178.5	207.8	179.3	726.1
2011	163.6	178.3	197.3	172.7	712.0
2012	164.0	191.7	214.6	187.5	757.8
2013	180.0	195.7	*219.3*	*195*	*790*
2014	*190*	*215*	*225*	*200*	*830*

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2010	.13	.18	.26	.15	.72
2011	.18	.22	.24	.19	.83
2012	.15	.24	.29	.19	.87
2013	.26	.30	*.34*	*.25*	*1.15*
2014	*.25*	*.32*	*.40*	*.28*	*1.25*

Cal-endar	QUARTERLY DIVIDENDS PAID B ■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2009	.108	.108	.108	.116	.44
2010	.116	.116	.116	.124	.47
2011	.124	.124	.124	.132	.50
2012	.132	.132	.132	.14	.54
2013	.14	.14	.152		

BUSINESS: Aqua America, Inc. is the holding company for water and wastewater utilities that serve approximately three million residents in Pennsylvania, Ohio, North Carolina, Illinois, Texas, New Jersey, Florida, Indiana, and five other states. Acquired AquaSource, 7/03; Consumers Water, 4/99; and others. Water supply revenues '12: residential, 60.5%; commercial, 16.1%; industrial & other, 23.4%. Officers and directors own 1.4% of the common stock; Blackrock, Inc, 6.3%; State Street Capital Corp., 5.7%; Vanguard Group 5.6% (4/13 Proxy). Chairman & Chief Executive Officer: Nicholas DeBenedictis. Incorporated: Pennsylvania. Address: 762 West Lancaster Avenue, Bryn Mawr, Pennsylvania 19010. Telephone: 610-525-1400. Internet: www.aquaamerica.com.

Aqua America's main long-term strategy is to grow through acquisitions. The United States is filled with thousands of small water utilities that are run by local municipalities. Due to the lack of proper maintenance, many of the facilities are in terrible shape. Since a large number of local governments are financially strapped, they find it more advantageous to sell their water systems to entities that have both greater managerial experience and the financial wherewithal to invest the funds required for the systems to operate properly. Aqua America bought 18 new companies last year and should add a similar number of new utilities in 2013.

Aqua America has been successful driving synergies through acquisitions. Historically, many of the operational benefits promised to shareholders of companies involved in acquisitions never take place. However, Aqua America has proven that it can purchase other water utilities and slash redundant overhead costs to improve operating margins.

Dividend growth prospects are excellent. Last quarter's 9% hike in the quarterly payout (all of our numbers have been adjusted for the recent five-for-four stock split) was much higher than that of a typical utility. Thanks in part to the company's low payout ratio, we estimate that the annual dividend hike will average about 10% for the foreseeable future.

Nonutility operations will play a larger role in the company's future. Aqua America recently completed another extension of its water pipeline in Pennsylvania. The pipeline is used to supply water to natural gas producers drilling in the Marcellus Shale. We expect the company to become much more involved in constructing pipelines because this is a more efficient way of providing the water needed for drilling than by using trucks.

Investors have to pay a slight premium for these shares. The average yield for a water utility is close to 3%. Thus, WTR's payout is about 40 basis points lower than the industry norm. We believe that this is a very reasonable price to pay for the company's robust dividend growth prospects, which should provide better-than-average total returns for a water utility over the pull to 2016-2018.

James A. Flood *October 18, 2013*

(A) Diluted egs. Excl. nonrec. gains (losses): '99, (9¢); '00, 2¢; '01, 2¢; '02, 4¢; '03, 3¢; '12, 18¢. Excl. gain from disc. operations: '12, 7¢; '13, 3¢. May not sum due to rounding. Next earnings report due late October.
(B) Dividends historically paid in early March, June, Sept. & Dec. ■ Div'd. reinvestment plan available (5% discount).
(C) In millions, adjusted for stock splits.

Company's Financial Strength	B++
Stock's Price Stability	100
Price Growth Persistence	70
Earnings Predictability	100

ARTESIAN RES. CORP. NDQ-ARTNA

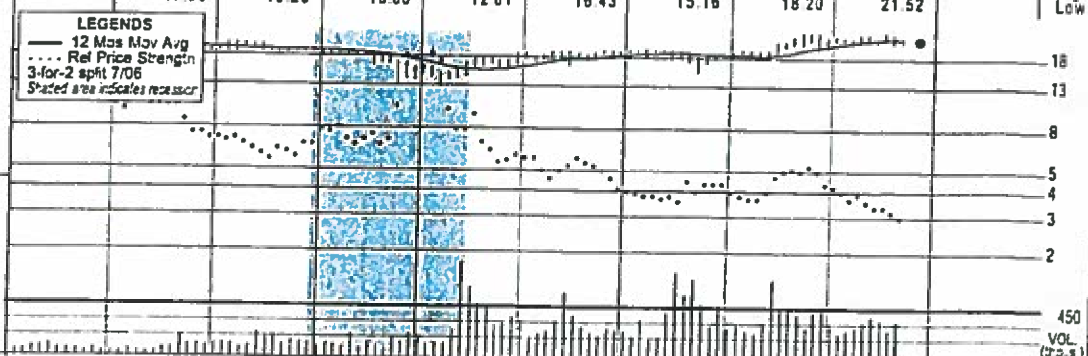
RECENT PRICE 22.18 | TRAILING P/E RATIO 22.2 | RELATIVE P/E RATIO 1.15 | DIV'D YLD 3.7% | VALUE LINE

RANKS

PERFORMANCE 2 Above Average
Technical 2 Above Average
SAFETY 3 Average
BETA .60 (1.00 = Market)

Financial Strength B
Price Stability 95
Price Growth Persistence 60
Earnings Predictability 85

	2005	2006	2007	2008	2009	2010	2011	2012	2013
High	22.62	22.33	23.67	19.31	18.73	19.59	19.99	24.43	24.27
Low	17.20	17.90	18.26	13.00	12.81	16.43	15.16	18.20	21.52



© VALUE LINE PUBLISHING LLC	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014/2015
SALES PER SH	7.52	7.77	7.20	7.59	8.11	8.48	7.56	8.10	--	
"CASH FLOW" PER SH	1.56	1.75	1.57	1.65	1.84	1.92	1.64	2.04	--	
EARNINGS PER SH	.81	.97	.90	.86	.97	1.00	.83	1.13	*1.05* A,B	*1.23* C/NA
DIV'DS DECL'D PER SH	.58	.61	.66	.71	.72	.75	.76	.79	--	
CAP'L SPENDING PER SH	3.35	5.08	3.66	6.09	2.32	2.57	1.83	2.36	--	
BOOK VALUE PER SH	9.60	10.15	11.66	11.86	12.15	12.44	13.12	13.57	--	
COMMON SHS OUTST'G (MILL)	6.02	6.09	7.30	7.40	7.51	7.65	8.61	8.71	--	
AVG ANN'L P/E RATIO	24.2	20.3	21.5	20.1	16.4	18.2	22.5	18.3	*21.1*	*18.0/NA*
RELATIVE P/E RATIO	1.28	1.10	1.14	1.21	1.09	1.16	1.41	1.17	--	
AVG ANN'L DIV'D YIELD	2.9%	3.1%	3.4%	4.1%	4.5%	4.1%	4.1%	3.8%	--	
SALES ($MILL)	45.3	47.3	52.5	56.2	60.9	64.9	65.1	70.6	--	*Bold figures are consensus earnings estimates and, using the recent prices, P/E ratios.*
OPERATING MARGIN	100.0%	45.6%	45.6%	45.1%	46.9%	46.5%	45.5%	48.7%	--	
DEPRECIATION ($MILL)	4.4	4.6	5.2	5.8	6.6	7.0	7.4	7.9	--	
NET PROFIT ($MILL)	5.0	6.1	6.3	6.4	7.3	7.6	6.7	9.8	--	
INCOME TAX RATE	39.9%	39.0%	39.8%	40.8%	40.1%	40.0%	40.8%	40.2%	--	
NET PROFIT MARGIN	11.1%	12.8%	11.9%	11.4%	11.9%	11.7%	10.4%	14.0%	--	
WORKING CAP'L ($MILL)	d1.8	d8.8	2.5	d20.9	d23.3	d27.9	d11.4	d11.4	--	
LONG-TERM DEBT ($MILL)	92.4	92.1	91.8	107.6	106.0	105.1	106.5	106.3	--	
SHR. EQUITY ($MILL)	57.8	61.8	85.1	87.8	91.2	95.1	113.0	118.2	--	
RETURN ON TOTAL CAP'L	5.3%	5.8%	5.3%	4.7%	5.2%	5.6%	4.6%	5.9%	--	
RETURN ON SHR. EQUITY	8.7%	9.8%	7.4%	7.3%	8.0%	8.0%	6.0%	8.3%	--	
RETAINED TO COM EQ	2.7%	3.8%	2.1%	1.4%	2.1%	2.0%	.5%	2.5%	--	
ALL DIV'DS TO NET PROF	69%	61%	71%	81%	74%	75%	92%	70%	--	

A No. of analysts changing earn. est. in last 4 days: 0 up, 0 down, consensus 5-year earnings growth not available. B Based upon 4 analysts' estimates. C Based upon 4 analysts' estimates.

ANNUAL RATES

of change (per share)	5 Yrs.	1 Yr.
Sales	1.5%	7.0%
"Cash Flow"	3.0%	24.0%
Earnings	2.0%	36.0%
Dividends	4.5%	4.0%
Book Value	4.5%	3.5%

Fiscal Year	QUARTERLY SALES ($mill.) 1Q	2Q	3Q	4Q	Full Year
12/31/11	14.8	16.5	17.7	16.1	65.1
12/31/12	16.7	17.9	19.0	17.0	70.6
12/31/13	16.3	17.8			
12/31/14					

Fiscal Year	EARNINGS PER SHARE 1Q	2Q	3Q	4Q	Full Year
12/31/10	.22	.24	.38	.16	1.00
12/31/11	.14	.23	.25	.20	.83
12/31/12	.28	.32	.33	.20	1.13
12/31/13	.19	.28	*.34*	*.25*	
12/31/14	*.20*				

Cal-endar	QUARTERLY DIVIDENDS PAID 1Q	2Q	3Q	4Q	Full Year
2010	.187	.188	.188	.189	.75
2011	.19	.19	.19	.193	.76
2012	.193	.198	.198	.203	.79
2013	.203	.206	.206	.209	

INSTITUTIONAL DECISIONS

	4Q'12	1Q'13	2Q'13
to Buy	28	32	31
to Sell	32	26	30
Hld's(000)	3052	3036	3029

ASSETS ($mill.)	2011	2012	6/30/13
Cash Assets	.3	.6	.5
Receivables	8.6	8.7	9.1
Inventory	1.5	1.4	1.5
Other	2.9	2.8	1.2
Current Assets	13.3	13.5	12.3
Property, Plant & Equip, at cost	435.0	454.4	--
Accum Depreciation	77.4	83.8	--
Net Property	357.6	370.6	374.8
Other	7.8	7.6	7.6
Total Assets	378.7	391.7	394.7
LIABILITIES ($mill.)			
Accts Payable	2.8	3.5	1.9
Debt Due	13.8	12.6	10.7
Other	8.1	8.8	9.2
Current Liab	24.7	24.9	21.8

LONG-TERM DEBT AND EQUITY as of 6/30/13

Total Debt $116.8 mill. Due In 5 Yrs. NA
LT Debt $106.1 mill.
Including Cap. Leases NA (47% of Cap'l)
Leases, Uncapitalized Annual rentals NA

Pension Liability $.4 mill. in '12 vs $.5 mill. in '11

Pfd Stock None Pfd Div'd Paid None

Common Stock 8,791,642 shares (53% of Cap'l)

INDUSTRY: Water Utility

BUSINESS: Artesian Resources Corporation, through its subsidiaries, provides water, wastewater, and other services on the Delmarva Peninsula. It distributes and sells water to residential, commercial, industrial, municipal, and utility customers in Delaware, Maryland, and Pennsylvania. The company also offers water for public and private fire protection to customers in its service territories. In addition, it provides contract water and wastewater services, water and sewer service line protection plans, and wastewater management services, as well as design, construction, and engineering services. As of December 31, 2012, the company served approximately 79,000 metered water customers through 1,162 miles of transmission and distribution mains. Has 229 employees. Chairman, C.E.O. & President: Dian C. Taylor. Address: 664 Churchmans Rd., Newark, DE 19702. Tel.: (302) 453-6900. Internet: http://www.artesianwater.com.

J.V.

October 18, 2013

TOTAL SHAREHOLDER RETURN
Dividends plus appreciation as of 9/30/2013

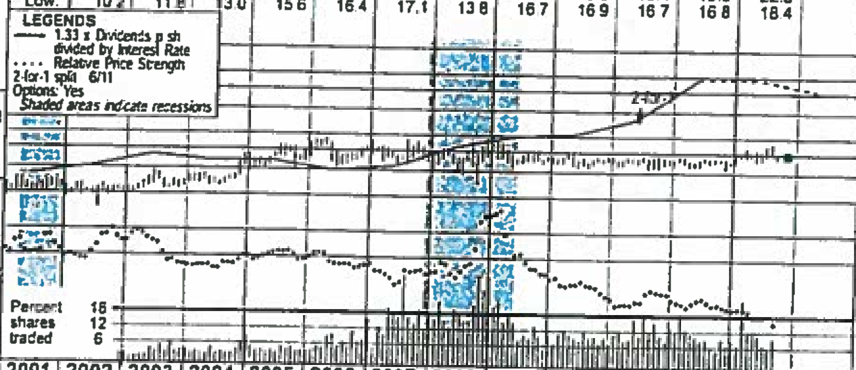
3 Mos.	6 Mos.	1 Yr.	3 Yrs.	5 Yrs.
0.79%	0.84%	-0.68%	31.05%	63.01%

CALIFORNIA WATER NYSE-CWT

RECENT PRICE 19.73 | P/E RATIO 22.4 (Trailing: 21.2 Median: 21.0) | RELATIVE P/E RATIO 1.27 | DIV'D YLD 3.4% | VALUE LINE

TIMELINESS 4 Lowered 10/4/13
SAFETY 3 Lowered 7/27/07
TECHNICAL 3 Lowered 8/23/13
BETA .65 (1.00 = Market)

High:	13.4	15.7	19.0	21.1	22.9	22.7	23.3	24.1	19.8	19.4	19.3	22.3		Target Price Range		
Low:	10.2	11.8	13.0	15.6	16.4	17.1	13.8	16.7	16.9	16.7	16.8	18.4		2016	2017	2018



2016-18 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	30	(+50%)	13%
Low	20	(Nil)	4%

Insider Decisions

	N	D	J	F	M	A	M	J	J
to Buy	0	0	0	0	0	0	0	0	0
Options	0	0	0	2	0	0	0	0	0
to Sell	0	0	0	0	0	0	0	0	0

Institutional Decisions

	4Q2012	1Q2013	2Q2013
to Buy	54	86	61
to Sell	63	39	57
Hld's(000)	22078	26409	26677

% TOT. RETURN 9/13

	THIS STOCK	VL ARITH.* INDEX
1 yr.	12.6	31.2
3 yr.	21.6	60.1
5 yr.	24.3	110.2

1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	© VALUE LINE PUB. LLC	16-18
7.74	7.38	7.98	8.08	8.13	8.67	8.18	8.59	8.72	8.10	8.88	9.90	10.82	11.05	12.00	13.34	12.55	14.15	Revenues per sh	16.00
1.46	1.30	1.37	1.26	1.10	1.32	1.26	1.42	1.52	1.35	1.56	1.86	1.93	1.93	2.07	2.32	2.05	2.25	"Cash Flow" per sh	2.75
.92	.73	.77	.66	.47	.63	.61	.73	.74	.67	.75	.95	.93	.91	.86	1.02	.80	1.05	Earnings per sh A	1.35
.53	.54	.54	.55	.56	.56	.56	.57	.57	.58	.58	.59	.59	.60	.62	.63	.64	.68	Div'd Decl'd per sh B ■	.90
1.30	1.37	1.72	1.23	2.04	2.91	2.19	1.87	2.01	2.14	1.84	2.41	2.66	2.97	2.83	3.04	2.65	2.90	Cap'l Spending per sh	3.00
6.50	6.69	6.71	6.45	6.48	6.56	7.22	7.83	7.90	9.07	9.25	9.72	10.13	10.45	10.76	11.28	13.40	13.85	Book Value per sh C	15.00
25.24	25.24	25.87	30.29	30.36	30.36	33.66	36.73	35.78	41.31	41.33	41.45	41.53	41.67	41.82	41.98	47.75	48.00	Common Shs Outst'g D	50.0
12.6	17.8	17.8	19.6	27.1	19.8	22.1	20.1	24.9	29.2	25.1	19.8	19.7	20.3	21.3	17.9	Bold figures are Value Line estimates		Avg Ann'l P/E Ratio	19.0
.73	.93	1.01	1.27	1.39	1.08	1.26	1.06	1.33	1.58	1.39	1.19	1.31	1.29	1.34	1.14			Relative P/E Ratio	1.25
4.6%	4.2%	4.0%	4.3%	4.4%	4.5%	4.2%	3.9%	3.1%	2.9%	3.0%	3.1%	3.1%	3.2%	3.4%	3.5%			Avg Ann'l Div'd Yield	3.6%

CAPITAL STRUCTURE as of 6/30/13
Total Debt $507.6 mill. Due in 5 Yrs $65.3 mill.
LT Debt $430.7 mill. LT Interest $29.5 mill.
(LT interest earned: 6.7x; total int. cov.: 6.0x)
(43% of Cap'l)
Pension Assets-12/12 $202.9 mill.
Oblig. $402.9 mill.
Pfd Stock None
Common Stock 47,734,035 shs.
as of 8/1/13
MARKET CAP: $950 million (Small Cap)

2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014		16-18
277.1	315.6	320.7	334.7	367.1	410.3	449.4	460.4	501.8	560.0	590	650	Revenues ($mill) E	800
13.4	25.0	27.2	25.6	31.2	39.8	40.6	37.7	36.1	42.6	40.0	53.0	Net Profit ($mill)	67.0
39.9%	39.6%	42.4%	37.4%	39.9%	37.7%	40.3%	39.5%	40.5%	37.5%	34.0%	39.0%	Income Tax Rate	39.0%
10.3%	3.2%	3.3%	10.6%	8.3%	8.6%	7.6%	4.2%	7.6%	8.0%	8.0%	8.5%	AFUDC % to Net Profit	10.0%
50.2%	49.6%	48.3%	43.5%	42.9%	41.6%	47.1%	52.4%	51.7%	47.8%	42.0%	46.5%	Long-Term Debt Ratio	50.0%
49.1%	50.8%	51.1%	55.9%	56.6%	58.4%	52.9%	47.6%	48.3%	52.2%	58.0%	53.5%	Common Equity Ratio	50.0%
498.4	565.9	568.1	670.1	674.9	690.4	794.9	914.7	931.5	908.2	1050	1125	Total Capital ($mill)	1400
759.5	800.3	862.7	941.5	1010.2	1112.4	1198.1	1294.3	1381.1	1457.1	1510	1575	Net Plant ($mill)	1825
5.6%	6.1%	6.3%	5.2%	5.9%	7.1%	6.5%	5.5%	5.5%	6.3%	5.5%	6.0%	Return on Total Cap'l	6.5%
7.8%	8.9%	9.3%	6.8%	8.1%	9.9%	9.6%	8.6%	8.0%	9.0%	7.0%	8.0%	Return on Shr. Equity	9.5%
7.9%	9.0%	9.3%	6.8%	8.1%	9.9%	9.6%	8.6%	8.0%	9.0%	7.0%	8.0%	Return on Com Equity	9.5%
.7%	2.1%	2.1%	1.0%	1.8%	3.8%	3.8%	3.0%	2.3%	3.4%	1.5%	3.0%	Retained to Com Eq	3.0%
91%	77%	73%	86%	77%	61%	60%	66%	71%	62%	75%	62%	All Div'ds to Net Prof	67%

CURRENT POSITION ($MILL.)	2011	2012	6/30/13
Cash Assets	27.2	38.8	38.8
Other	86.7	107.8	125.4
Current Assets	113.9	146.6	164.1
Accts Payable	48.9	46.8	46.7
Debt Due	53.7	136.3	76.9
Other	49.3	59.7	72.6
Current Liab.	151.9	242.8	196.2
Fix. Chg. Cov.	278%	297%	325%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '10-'12 to '16-'18
Revenues	4.0%	7.0%	4.5%
"Cash Flow"	5.5%	7.5%	4.5%
Earnings	5.0%	5.5%	6.5%
Dividends	1.0%	1.5%	6.5%
Book Value	5.0%	4.5%	5.5%

Cal-endar	QUARTERLY REVENUES ($ mill.) E Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2010	90.3	118.3	146.3	105.5	460.4
2011	98.1	131.4	169.3	103.0	501.8
2012	116.8	143.6	178.1	121.5	560.0
2013	111.4	154.6	190	134	590
2014	135	165	210	140	650

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2010	.05	.25	.49	.12	.91
2011	.03	.29	.50	.04	.86
2012	.03	.31	.56	.12	1.02
2013	d.03	.28	.50	.05	.80
2014	.05	.30	.55	.15	1.05

Cal-endar	QUARTERLY DIVIDENDS PAID B ■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2009	.148	.148	.148	.148	.59
2010	.149	.149	.149	.149	.60
2011	.154	.154	.154	.154	.62
2012	.1575	.1575	.1575	.1575	.63
2013	.16	.16	.16		

BUSINESS: California Water Service Group provides regulated and nonregulated water service to roughly 471,900 customers in 83 communities in California, Washington, New Mexico, and Hawaii. Main service areas: San Francisco Bay area, Sacramento Valley, Salinas Valley, San Joaquin Valley & parts of Los Angeles. Acquired Rio Grande Corp; West Hawaii Utilities (9/08). Revenue breakdown, '12: residential, 66%; business, 18%; public authorities, 4%; industrial, 4%; other 8%. '12 reported depreciation rate: 2.8%. Has 1,131 employees. President, Chairman, and Chief Executive Officer: Peter C. Nelson. Inc.: Delaware. Address: 1720 North First Street, San Jose, California 95112-4598. Telephone: 408-367-8200. Internet: www.calwatergroup.com.

This will not be an easy year for the California Water Service Group. As expected, the utility posted its second-consecutive year-over-year negative earnings comparison in the June-ended period. What's more, we expect this trend to continue for the second half of the year.

What's behind the bad earnings? In California, utilities run on three-year regulatory cycles. This means that they can only seek rate relief every third year. Quite often, by the final year of the cycle, expenses have outpaced the higher revenues that were originally permitted.

A major rate case is close to being settled. In mid-2012, California filed a petition with the California Public Utility Commission (CPUC) seeking to raise its rates by 20%. The utility has been in negotiations with the CPUC for months, and it now believes that 95% of the matters involved are resolved. Even though many of California Water's expenses were prudently spent on improving its infrastructure, that doesn't mean that its request will be automatically approved. There is a tremendous amount of political pressure brought upon regulators to keep water customers (i.e. voters) rates low. On balance, we estimate the final decision will be fairly reasonable. The allowed return on equity will most likely be low on a relative basis, but the utility will at least have a good chance of earning it.

All told, earnings should decline sharply in 2013, but rebound in 2014. Due to the aforementioned reasons, we think that California Water's share net will plunge 22% this year. Next year, due mostly to rate relief, we expect the bottom line to snap back, by $0.25, to $1.05 a share.

We think that there are other stocks in the water utility industry that hold greater appeal than California Water. On the plus side, these shares have a yield that is nearly 70 basis points greater than certain of its peers. Moreover, as a result of a large stock issuance earlier this year, the company's finances have improved significantly. However, the utility's subpar dividend growth potential over the next several years and the equity's Below Average Timeliness rank more than offset these positives, in our opinion.

James A. Flood *October 18, 2013*

(A) Basic EPS. Excl. nonrecurring gain (loss): '00, (4¢); '01, 2¢; '02, 4¢; '11, 4¢. Next earnings report due mid-August.
(B) Dividends historically paid in late Feb., May, Aug., and Nov. ■ Div'd reinvestment plan available.
(C) Incl. intangible assets. In '12: $18.8 mill., $0.44/sh.
(D) In millions, adjusted for splits.
(E) Excludes non-reg. rev.

Company's Financial Strength	B++
Stock's Price Stability	100
Price Growth Persistence	50
Earnings Predictability	90

CONNECTICUT WATER NDQ-CTWS

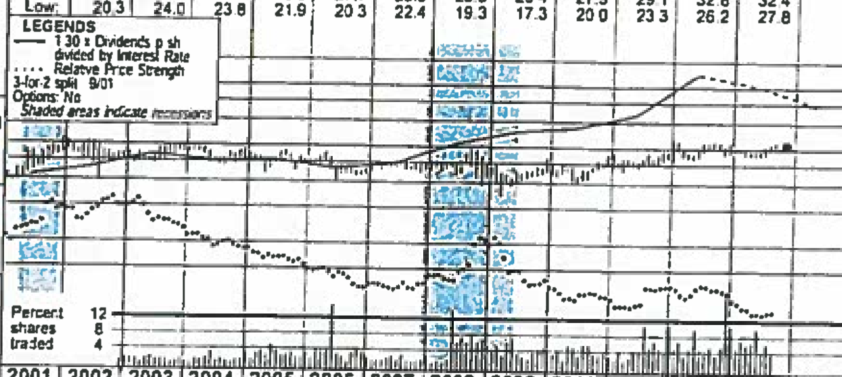
RECENT PRICE 31.35 | P/E RATIO 18.9 (Trailing: 21.5 / Median: 23.0) | RELATIVE P/E RATIO 1.07 | DIV'D YLD 3.2% | VALUE LINE

High:	31.1	30.4	29.8	28.2	27.7	25.6	29.0	26.4	27.9	29.1	32.8	32.4
Low:	20.3	24.0	23.8	21.9	20.3	22.4	19.3	17.3	20.0	23.3	26.2	27.8

TIMELINESS 4 Lowered 3/23/13
SAFETY 3 New 1/18/13
TECHNICAL 3 Lowered 10/11/13
BETA .75 (1.00 = Market)

LEGENDS
— 1.30 x Dividends p sh divided by Interest Rate
.... Relative Price Strength
3-for-2 split 9/01
Options: No
Shaded areas indicate recessions

Target Price Range 2016 | 2017 | 2018



2016-18 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	40	(+30%)	10%
Low	30	(-5%)	3%

Insider Decisions

	N	D	J	F	M	A	M	J	J
to Buy	0	2	0	0	0	0	0	0	0
Options	0	0	0	0	0	0	0	0	0
to Sell	0	0	0	0	0	0	0	0	0

Institutional Decisions

	4Q2012	1Q2013	2Q2013
to Buy	49	52	39
to Sell	16	21	39
Hld's(000)	4069	4336	4492

Percent shares traded 12 8 4

% TOT. RETURN 9/13

	THIS STOCK	VL ARITH.* INDEX
1 yr.	4.1	31.2
3 yr.	49.7	60.1
5 yr.	33.5	110.2

1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	© VALUE LINE PUB. LLC	16-18
5.67	5.58	5.87	5.70	5.93	5.77	5.91	6.04	5.81	5.68	7.05	7.24	6.93	7.65	7.93	7.63	8.65	8.90	Revenues per sh	11.25
1.51	1.59	1.65	1.73	1.78	1.79	1.89	1.91	1.62	1.52	1.90	1.95	1.93	2.04	2.11	2.10	2.55	2.65	"Cash Flow" per sh	2.75
1.00	1.02	1.03	1.09	1.13	1.12	1.15	1.16	.85	.81	1.05	1.11	1.19	1.13	1.13	1.53	1.60	1.70	Earnings per sh A	1.80
.77	.78	.79	.79	.80	.81	.83	.84	.85	.86	.87	.88	.90	.92	.94	.96	.98	1.01	Div'd Decl'd per sh B ■	1.11
1.99	1.12	1.42	1.43	1.86	1.98	1.49	1.58	1.96	1.95	2.24	2.44	3.28	3.06	2.61	2.34	2.75	2.85	Cap'l Spending per sh	2.90
8.26	8.52	8.61	8.92	9.25	10.06	10.46	10.94	11.52	11.60	11.95	12.23	12.67	13.05	13.50	16.89	17.25	17.80	Book Value per sh D	20.40
6.79	6.80	7.26	7.29	7.65	7.94	7.97	8.04	8.17	8.27	8.39	8.46	8.57	8.68	8.76	10.97	11.10	11.25	Common Shs Outst'g C	12.00
12.9	15.5	18.2	18.2	21.5	24.3	23.5	22.9	28.6	29.0	23.0	22.2	18.4	20.7	23.0	19.4	Bold figures are Value Line estimates		Avg Ann'l P/E Ratio	20.0
.74	.81	1.04	1.18	1.10	1.33	1.34	1.21	1.52	1.57	1.22	1.34	1.23	1.32	1.44	1.24			Relative P/E Ratio	1.35
6.0%	4.9%	4.2%	4.0%	3.3%	3.0%	3.0%	3.1%	3.4%	3.6%	3.6%	3.6%	4.1%	3.9%	3.6%	3.2%			Avg Ann'l Div'd Yield	3.4%

CAPITAL STRUCTURE as of 6/30/13
Total Debt $180.2 mill. Due in 5 Yrs $14.8 mill.
LT Debt $178.7 mill. LT Interest $7.6 mill.
(Total interest coverage: 8.8x)
(49% of Cap'l)
Leases, Uncapitalized: Annual rentals $.2 mill.
Pension Assets $45.4 mill.
Oblig. $66.5 mill.
Pfd Stock $0.8 mill. Pfd Divd NMF
Common Stock 11,003,512 shs.
as of 7/31/13
MARKET CAP: $350 million (Small Cap)

2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014		16-18
47.1	43.5	47.5	45.9	59.0	61.3	59.4	66.4	69.4	83.8	95.0	100	Revenues ($mill)	135
9.2	9.4	7.2	6.7	8.8	9.4	10.2	9.8	9.9	13.6	17.5	19.0	Net Profit ($mill)	21.0
17.9%	22.9%	--	23.5%	32.4%	27.2%	19.5%	35.2%	41.3%	32.0%	32.0%	33.0%	Income Tax Rate	35%
--	--	--	--	--	1.7%	--	--	1.8%	1.7%	2.0%	2.0%	AFUDC % to Net Profit	3.0%
43.5%	42.8%	44.9%	44.4%	47.8%	45.9%	50.6%	49.5%	53.2%	49.0%	49.5%	49.5%	Long-Term Debt Ratio	48.5%
55.9%	56.7%	54.6%	55.1%	51.8%	52.7%	49.1%	50.2%	45.5%	50.8%	50.5%	50.5%	Common Equity Ratio	51.5%
148.9	155.1	172.3	174.1	193.2	196.5	221.3	225.6	254.2	364.6	375	395	Total Capital ($mill)	475
238.9	246.1	247.7	268.1	284.3	302.3	325.2	344.2	352.4	447.9	470	490	Net Plant ($mill)	550
7.5%	7.0%	5.0%	4.9%	5.5%	5.9%	5.5%	5.4%	4.9%	4.8%	5.5%	5.0%	Return on Total Cap'l	5.5%
10.9%	10.6%	7.5%	6.9%	8.7%	9.0%	9.3%	8.6%	8.3%	7.3%	9.0%	9.5%	Return on Shr. Equity	8.5%
11.0%	10.6%	7.6%	7.0%	8.7%	9.1%	9.4%	8.7%	8.3%	7.3%	9.0%	9.5%	Return on Com Equity	8.5%
3.2%	3.1%	.3%	NMF	1.6%	1.9%	2.3%	1.6%	1.4%	2.7%	3.5%	3.5%	Retained to Com Eq	3.0%
71%	71%	95%	105%	82%	79%	76%	81%	83%	62%	62%	59%	All Div'ds to Net Prof	62%

CURRENT POSITION ($MILL.)	2011	2012	6/30/13
Cash Assets	1.0	13.2	7.5
Accounts Receivable	14.9	11.5	12.1
Other	3.0	11.7	13.5
Current Assets	18.9	36.4	33.1
Accts Payable	7.2	10.0	7.3
Debt Due	--	3.0	1.5
Other	23.2	2.9	3.1
Current Liab.	30.4	15.9	11.9
Fix. Chg. Cov.	419%	455%	460%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '10-'12 to '16-'18
Revenues	3.5%	6.0%	6.5%
"Cash Flow"	2.5%	6.0%	4.5%
Earnings	1.5%	6.5%	5.5%
Dividends	1.5%	2.0%	3.5%
Book Value	5.5%	6.5%	6.0%

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2010	13.8	15.9	21.0	15.7	66.4
2011	16.0	17.4	20.6	15.4	69.4
2012	18.5	21.3	24.5	19.5	83.8
2013	21.5	22.5	27.0	24.0	95.0
2014	22.0	24.0	30.0	24.0	100

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2010	.12	.27	.54	.20	1.13
2011	.26	.37	.39	.11	1.13
2012	.22	.47	.67	.16	1.53
2013	.24	.39	.68	.29	1.60
2014	.30	.47	.68	.25	1.70

Cal-endar	QUARTERLY DIVIDENDS PAID B ■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2009	.222	.222	.228	.228	.90
2010	.228	.228	.233	.233	.922
2011	.233	.233	.238	.238	.942
2012	.238	.238	.2425	.2425	.962
2013	.2425	.2425	.2475		

BUSINESS: Connecticut Water Service, Inc. is a non-operating holding company, whose income is derived from earnings of its wholly-owned subsidiary companies (regulated water utilities). Its largest subsidiary, Connecticut Water, accounted for about 85% of the holding company's net income in 2012, and provides water services to 400,000 people in 55 towns throughout Connecticut and Maine. Acquired The Maine Water Co., 1/12; Biddeford and Saco Water, 12/12. Inc.: CT. Has about 260 employees. Chairman/President/CEO: Eric W. Thornburg. Officers and directors own 2.2% of the common stock; BlackRock, Inc. 6.7%; The Vanguard Group, 5.3%. Address: 93 West Main Street, Clinton, CT 06413. Telephone: (860) 669-8636. Internet: www.ctwater.com.

Connecticut Water Service has finally reached a definitive deal with all of the state's regulators. In September, the Connecticut Public Regulatory Authority (PURA) agreed to a deal that had been reached earlier among Connecticut Water and the state's Attorney General and Consumer Council. PURA was the final hurdle in the approval process, and it didn't alter the agreement in any meaningful way.

Ratepayers will benefit from the settlement. Customers will see their water bills decline over the next two years as Connecticut Water will pass along to them a tax refund it was granted by the IRS for the 2010-2012 period. In addition, the utility agreed not to seek higher rates before October, 2015.

Connecticut Water will benefit too. Permission was granted for the company to establish a Revenue Adjustment Mechanism, which will allow it to keep the tax benefit from the IRS refund going forward. These funds will be allowed to flow through to shareholders until the next time the company seeks higher rates.

The earnings picture looks brighter. Following four static years of earnings, the company enjoyed strong results in 2012, as share net rose 35%. With the new arrangement with regulators in place, we think that Connecticut Water's bottom line will increase close to 5%, both this year and next. Moreover, the company will earn close to its allowed return on equity.

The recent dividend hike was somewhat disappointing. Over the past five- and 10-year periods, Connecticut Water's dividend growth rate averaged only 2.0%, and 1.5%, respectively. Both percentages were among the lowest in the water utility industry. Following the company's solid profits in 2012, along with its improved earning prospects, we had hoped that the most recent quarterly payout to shareholders would have been more generous than the 2% increase declared in August.

We can't find too many reasons to recommend these shares at this juncture. While the stock's yield is slightly higher than the average of its peers, its dividend growth prospects to 2016-2018 are subpar for the group. Furthermore, this equity carries a 4 (Below Average) rank for Timeliness.

James A. Flood *October 18, 2013*

(A) Diluted earnings. Next earnings report due mid-November. Quarterly earnings do no add in '12 due to rounding.
(B) Dividends historically paid in mid-March, June, September, and December. ■ Div'd reinvestment plan available.
(C) In millions, adjusted for split.
(D) Includes intangibles. In '12: $31.7 million/$2.89 a share.

Company's Financial Strength	B+
Stock's Price Stability	90
Price Growth Persistence	50
Earnings Predictability	80

SJW CORP. NYSE-SJW

RECENT PRICE 27.72 | P/E RATIO 20.8 (Trailing: 21.7 Median: 23.0) | RELATIVE P/E RATIO 1.18 | DIV'D YLD 2.7% | VALUE LINE

TIMELINESS 1 Raised 8/5/13
SAFETY 3 New 4/22/11
TECHNICAL 4 Lowered 10/18/13
BETA .85 (1.00 = Market)

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
High:	15.1	15.0	19.6	27.8	45.3	43.0	35.1	30.4	28.2	26.8	26.9	28.9	
Low:	12.7	12.6	14.6	16.1	21.2	27.7	20.0	18.2	21.6	20.9	22.6	24.5	

2016-18 PROJECTIONS

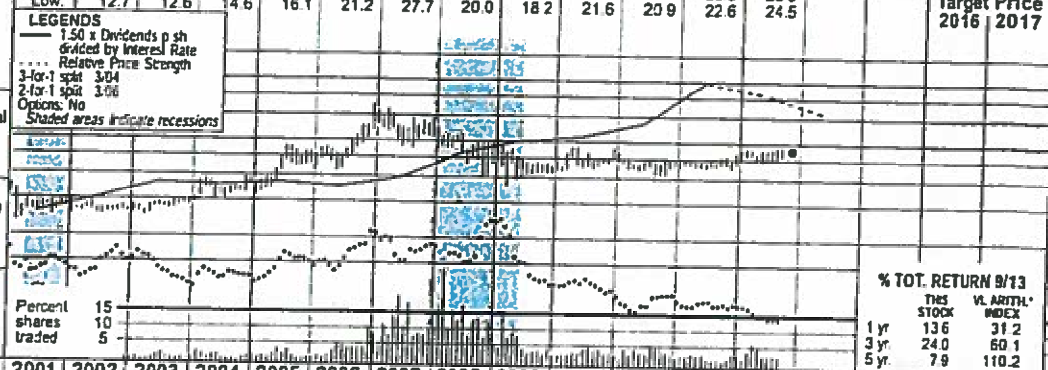
	Price	Gain	Ann'l Total Return
High	40	(+45%)	12%
Low	30	(+10%)	5%

Insider Decisions

	N	D	J	F	M	A	M	J	J
to Buy	4	0	0	0	0	0	0	0	0
Options	0	1	0	0	0	0	0	0	0
to Sell	0	1	0	0	0	0	0	0	0

Institutional Decisions

	4Q2012	1Q2013	2Q2013
to Buy	34	46	47
to Sell	30	20	28
Hld's(000)	9043	10000	10629



Target Price Range
2016 | 2017 | 2018

% TOT. RETURN 9/13

	THIS STOCK	VL ARITH.* INDEX
1 yr.	13.6	31.2
3 yr.	24.0	60.1
5 yr.	7.9	110.2

1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	© VALUE LINE PUB. LLC	16-18
5.79	5.58	6.40	6.74	7.45	7.97	8.20	9.14	9.66	10.35	11.25	12.12	11.68	11.62	12.85	14.01	14.05	14.75	Revenues per sh	16.30
1.27	1.25	1.43	1.23	1.49	1.55	1.75	1.89	2.21	2.38	2.30	2.44	2.21	2.33	2.60	2.97	3.25	3.50	"Cash Flow" per sh	3.65
.83	.76	.87	.58	.77	.78	.91	.87	1.12	1.19	1.04	1.08	.81	.84	1.11	1.18	1.30	1.40	Earnings per sh A	1.60
.38	.39	.40	.41	.43	.46	.49	.51	.53	.57	.61	.65	.66	.68	.69	.71	.73	.75	Div'd Decl'd per sh B■	.90
1.27	1.81	1.77	1.89	2.63	2.06	3.41	2.31	2.83	3.87	6.62	3.79	3.17	5.65	3.75	5.67	5.25	5.20	Cap'l Spending per sh	4.85
7.02	7.53	7.88	7.93	8.17	8.40	9.11	10.11	10.72	12.43	12.90	13.99	13.66	13.75	14.20	14.71	15.40	16.40	Book Value per sh	19.15
19.02	19.01	18.27	18.27	18.27	18.27	18.27	18.27	18.27	18.29	18.36	18.18	18.50	18.55	18.59	18.67	20.25	21.00	Common Shs Outst'g C	23.00
11.2	13.1	15.5	33.1	18.5	17.3	15.4	19.6	19.7	23.5	33.4	26.2	28.7	29.1	21.2	20.4	Bold figures are	Value Line	Avg Ann'l P/E Ratio	22.0
.65	.68	.88	2.15	.95	.94	.88	1.04	1.05	1.27	1.77	1.58	1.91	1.85	1.33	1.30	estimates		Relative P/E Ratio	1.45
4.3%	3.9%	3.0%	2.1%	3.0%	3.4%	3.5%	3.0%	2.4%	2.0%	1.7%	2.3%	2.8%	2.8%	2.9%	3.0%			Avg Ann'l Div'd Yield	2.6%

CAPITAL STRUCTURE as of 6/30/13
Total Debt $335.8 mill. Due in 5 Yrs $21.2 mill.
LT Debt $335.3 mill. LT Interest $18.6 mill.
(Total interest coverage: 4.6x) (52% of Cap'l)

Leases, Uncapitalized: Annual rentals $4.7 mill.

Pension Assets $75.5 mill. Oblig. $141.0 mill.

Pfd Stock None.

Common Stock 20,137,197 shs. as of 7/26/13

MARKET CAP: $550 million (Small Cap)

2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	© VALUE LINE PUB. LLC	16-18
149.7	166.9	180.1	189.2	206.6	220.3	216.1	215.6	239.0	261.5	285	310	Revenues ($mill)	375
15.7	16.0	20.7	22.2	19.3	20.2	15.2	15.8	20.9	22.3	26.0	29.0	Net Profit ($mill)	37.0
36.2%	42.1%	41.6%	40.8%	39.4%	39.5%	40.4%	38.8%	41.1%	41.1%	41.0%	40.0%	Income Tax Rate	40.0%
1.6%	2.1%	1.6%	2.1%	2.7%	2.3%	2.0%	--	2.0%	2.0%	3.0%	4.0%	AFUDC % to Net Profit	5.0%
45.6%	43.7%	42.6%	41.8%	47.7%	46.0%	49.4%	53.7%	56.6%	55.0%	54.5%	54.0%	Long-Term Debt Ratio	51.0%
54.4%	56.3%	57.4%	58.2%	52.3%	54.0%	50.6%	46.3%	43.4%	45.0%	45.5%	46.0%	Common Equity Ratio	49.0%
306.0	329.3	341.2	391.8	453.2	470.9	439.6	550.7	607.9	610.2	685	745	Total Capital ($mill)	900
426.5	456.8	484.8	541.7	645.5	684.2	718.5	785.5	756.2	831.6	890	950	Net Plant ($mill)	1150
6.9%	6.5%	7.6%	7.0%	5.7%	5.8%	4.4%	4.3%	4.9%	5.0%	5.0%	5.0%	Return on Total Cap'l	6.0%
10.0%	8.7%	10.6%	9.7%	8.2%	8.0%	6.0%	6.2%	7.9%	8.1%	8.5%	8.5%	Return on Shr. Equity	8.5%
10.0%	8.7%	10.6%	9.7%	8.2%	8.0%	6.0%	6.2%	7.9%	8.1%	8.5%	8.5%	Return on Com Equity	8.5%
4.7%	3.6%	5.6%	5.2%	3.5%	3.3%	1.2%	1.2%	3.1%	3.3%	3.5%	4.0%	Retained to Com Eq	3.5%
53%	58%	47%	45%	57%	59%	83%	80%	61%	59%	56%	54%	All Div'ds to Net Prof	56%

CURRENT POSITION ($MILL.)	2011	2012	6/30/13
Cash Assets	26.7	2.5	4.0
Other	42.2	40.4	44.2
Current Assets	68.9	42.9	48.2
Accts Payable	7.4	8.5	15.9
Debt Due	.8	20.7	.5
Other	20.1	19.9	28.8
Current Liab.	28.3	49.1	45.2
Fix. Chg. Cov.	276%	247%	231%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '10-'12 to '16-'18
Revenues	5.5%	4.0%	4.0%
"Cash Flow"	6.5%	3.5%	5.0%
Earnings	4.0%	-1.5%	7.5%
Dividends	5.0%	4.0%	4.5%
Book Value	5.5%	3.5%	5.0%

Calendar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2010	40.4	54.1	70.3	50.8	215.6
2011	43.7	59.0	73.9	62.4	239.0
2012	51.1	65.6	82.4	62.4	261.5
2013	50.1	74.2	90.7	70.0	285
2014	60.0	75.0	100	75.0	310

Calendar	EARNINGS PER SHARE A Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2010	.055	.24	.44	.11	.84
2011	.03	.29	.44	.35	1.11
2012	.06	.28	.53	.31	1.18
2013	.07	.37	.54	.32	1.30
2014	.10	.35	.60	.35	1.40

Calendar	QUARTERLY DIVIDENDS PAID B■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2009	.165	.165	.165	.165	.66
2010	.17	.17	.17	.17	.68
2011	.173	.173	.173	.173	.69
2012	.1775	.1775	.1775	.1775	.71
2013	.1825	.1825	.1825		

BUSINESS: SJW Corporation engages in the production, purchase, storage, purification, distribution, and retail sale of water. It provides water service to approximately 227,000 connections that serve a population of approximately one million people in the San Jose area and 8,700 connections that serve approximately 36,000 residents in a service area in the region between San Antonio and Austin, Texas. The company offers nonregulated water-related services, including water system operations, cash remittances, and maintenance contract services. SJW also owns and operates commercial real estate investments. Has about 375 employees. Chrm.: Charles J. Toeniskoetter. Inc.: CA. Address: 110 W. Taylor Street, San Jose, CA 95110. Tel.: (408) 279-7800. Int: www.sjwater.com.

A final decision on SJW's pending rate case will be delayed. The California Public Utility Commission (CPUC) has had to divert much of its resources to investigate the San Bruno gas pipeline explosion, which killed eight people in 2010. **Meanwhile, 2013 is benefiting from interim rate relief.** SJW is seeking substantial rate increases of 21.5% for 2013, 4.9% in 2014, and 12.6% in 2016. Until a final decision is reached on this request, the utility has been allowed to raise rates on an interim basis. Though earnings comparisons won't be impressive in the second half of the year, we still think that the utility's share net can increase 10%, to $1.30.

SJW's future is in the hands of regulators. While this statement is true for all utilities, SJW is more vulnerable than most. This is due to the enormous size of the rate hikes that it has petitioned for. Even though we view the company's expenditures as essential to the operations of its system, the sheer size of the requests puts the CPUC in a difficult position. It is politically very hard to raise rate payers' bills by such a large extent without a significant amount of political blow-back. **Therefore, our 2014 profit estimate for the company is pretty tenuous.** Earnings should be fine as long as the interim rate relief is in place. Once the CPUC makes a final decision, things could change for the worse. In any case, we should point out that California regulators have been reasonable in the past, and hopefully some sort of deal that satisfies both sides can be reached.

We expect SJW to tap the external markets in the years ahead. The company estimates that it will have to invest $100 million annually through 2016-2018 in order to upgrade its aging infrastructure. Internal cash flow will fall well short of generating sufficient funds to meet these outlays. Thus, there will be dilutive equity offerings and costly debt issuance. Both of these moves will impair the company's earnings growth.

SJW shares now carry our Highest rank (1) for Timeliness. Momentum investors may find this stock of interest, others might be scared off by the possibility of a harsh regulatory decision.

James A. Flood *October 18, 2013*

(A) Diluted earnings. Excludes nonrecurring losses: '03, $1.97; '04, $3.78; '05, $1.09; '06, $16.36; '08, $1.22; '10, 46¢. Next earnings report due late October. Quarterly egs. may not add due to rounding.
(B) Dividends historically paid in early March, June, September, and December. ■ Div'd reinvestment plan available.
(C) In millions, adjusted for stock splits.

Company's Financial Strength	B+
Stock's Price Stability	80
Price Growth Persistence	50
Earnings Predictability	80

MIDDLESEX WATER NDQ-MSEX

RECENT PRICE 20.31 | P/E RATIO 20.9 (Trailing: 19.7 Median: 22.0) | RELATIVE P/E RATIO 1.19 | DIV'D YLD 3.7% | VALUE LINE

TIMELINESS 2 Raised 5/7/13
SAFETY 2 New 10/21/01
TECHNICAL 3 Lowered 10/18/13
BETA .70 (1.00 = Market)

High:	20.0	21.2	21.8	23.5	20.5	20.2	19.8	17.9	19.3	19.4	19.6	22.5
Low:	13.7	15.8	16.7	17.1	16.5	16.9	12.0	11.6	14.7	16.5	17.5	18.6

Target Price Range 2016 | 2017 | 2018

2016-18 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	25	(+25%)	9%
Low	20	(Nil)	4%

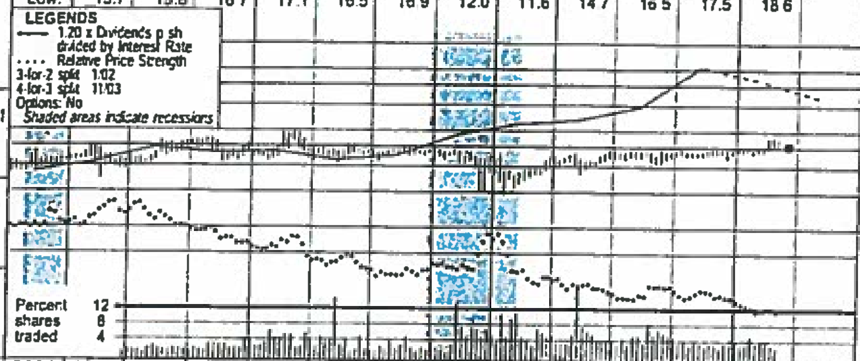
Insider Decisions

	N	D	J	F	M	A	M	J	J
to Buy	0	0	0	0	0	0	0	1	0
Options	0	0	0	0	0	0	0	0	0
to Sell	0	0	0	0	0	0	0	0	1

Institutional Decisions

	4Q2012	1Q2013	2Q2013
to Buy	38	38	37
to Sell	28	30	35
Hld's(000)	6656	6579	6489

LEGENDS
— 1.20 x Dividends p sh divided by Interest Rate
.... Relative Price Strength
3-for-2 split 1/02
4-for-3 split 11/03
Options: No
Shaded areas indicate recessions



% TOT. RETURN 9/13

	THIS STOCK	VL ARITH.* INDEX
1 yr.	16.0	31.2
3 yr.	42.8	60.1
5 yr.	50.6	110.2

1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	© VALUE LINE PUB. LLC	16-18
4.72	4.39	5.35	5.39	5.87	5.98	6.12	6.25	6.44	6.16	6.50	6.79	6.75	6.60	6.50	6.98	7.50	7.70	Revenues per sh	9.10
1.02	1.02	1.19	.99	1.16	1.20	1.15	1.23	1.33	1.33	1.49	1.53	1.40	1.55	1.46	1.56	1.65	1.85	"Cash Flow" per sh	2.30
.67	.71	.76	.51	.66	.73	.61	.73	.71	.62	.67	.89	.72	.96	.84	.90	1.00	1.05	Earnings per sh A	1.15
.57	.58	.60	.61	.62	.63	.65	.66	.67	.68	.69	.70	.71	.72	.73	.74	.75	.76	Div'd Decl'd per sh B■	.80
1.20	2.68	2.33	1.32	1.25	1.59	1.87	2.54	2.18	2.31	1.66	2.12	1.49	1.93	1.50	1.36	1.50	1.65	Cap'l Spending per sh	2.00
6.00	6.80	6.95	6.98	7.11	7.39	7.60	8.02	8.26	9.52	10.05	10.03	10.33	11.13	11.27	11.43	11.75	12.10	Book Value per sh D	12.90
8.54	9.82	10.00	10.11	10.17	10.36	10.48	11.36	11.58	13.17	13.25	13.40	13.52	15.57	15.70	15.82	16.00	16.25	Common Shs Outst'g C	17.00
13.4	15.2	17.6	28.7	24.6	23.5	33.0	26.4	27.4	22.7	21.6	19.8	21.0	17.8	21.7	20.8	Bold figures are		Avg Ann'l P/E Ratio	20.0
.77	.79	1.00	1.87	1.26	1.28	1.71	1.39	1.45	1.23	1.15	1.19	1.40	1.13	1.36	1.33	Value Line		Relative P/E Ratio	1.35
6.3%	5.4%	4.4%	4.2%	3.8%	3.7%	3.5%	3.4%	3.5%	3.7%	3.7%	4.0%	4.7%	4.2%	4.0%	4.0%	estimates		Avg Ann'l Div'd Yield	3.6%

CAPITAL STRUCTURE as of 6/30/13
Total Debt $166.7 mill. Due in 5 Yrs $60.0 mill.
LT Debt $133.5 mill. LT Interest $7.0 mill.
(LT interest coverage: 4.1x)
(42% of Cap'l)

Pension Assets-12/12 $37.9 mill.
Oblig. $62.8 mill.
Pfd Stock $3.4 mill. Pfd Div'd: $.2 mill.

Common Stock 15,847,729 shs.
as of 7/31/13

MARKET CAP: $325 million (Small Cap)

2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014		16-18
64.1	71.0	74.6	81.1	86.1	91.0	91.2	102.7	102.1	110.4	120	125	Revenues ($mill)	155
6.6	8.4	8.5	10.0	11.8	12.2	10.0	14.3	13.4	14.4	15.5	17.0	Net Profit ($mill)	20.0
32.8%	31.1%	27.6%	33.4%	32.6%	33.2%	34.1%	32.1%	32.7%	33.9%	34.0%	34.0%	Income Tax Rate	34.0%
--	--	--	--	--	--	--	6.8%	6.1%	3.4%	4.5%	4.5%	AFUDC % to Net Profit	5.0%
53.8%	53.8%	55.3%	49.5%	49.0%	45.6%	45.6%	43.1%	42.3%	41.5%	43.0%	43.0%	Long-Term Debt Ratio	43.0%
44.0%	42.5%	41.3%	47.5%	49.6%	51.8%	52.1%	55.8%	56.6%	57.4%	57.0%	57.0%	Common Equity Ratio	57.0%
181.1	214.5	231.7	264.0	268.8	259.4	267.9	310.5	312.5	316.5	330	345	Total Capital ($mill)	400
230.9	262.9	288.0	317.1	333.9	366.3	376.5	405.9	422.2	435.2	440	450	Net Plant ($mill)	510
5.0%	5.1%	5.0%	5.1%	5.6%	5.8%	5.0%	5.7%	5.2%	5.4%	4.5%	5.0%	Return on Total Cap'l	5.5%
7.9%	8.5%	8.2%	7.5%	8.6%	8.6%	7.0%	8.1%	7.5%	7.8%	8.0%	8.5%	Return on Shr. Equity	9.0%
8.0%	9.0%	8.6%	7.8%	8.7%	8.9%	7.0%	8.2%	7.5%	7.8%	8.0%	8.5%	Return on Com Equity	9.0%
NMF	.9%	.6%	1.3%	1.8%	2.0%	.1%	2.1%	1.0%	1.4%	2.0%	2.5%	Retained to Com Eq	3.0%
106%	93%	94%	84%	79%	78%	98%	75%	87%	83%	80%	73%	All Div'ds to Net Prof	70%

CURRENT POSITION ($MILL.)	2011	2012	6/30/13
Cash Assets	3.1	3.0	3.0
Other	19.8	21.6	23.1
Current Assets	22.9	24.6	26.1
Accts Payable	5.7	3.8	5.1
Debt Due	4.6	11.1	33.2
Other	36.4	41.1	17.6
Current Liab.	46.7	56.0	55.9
Fix. Chg. Cov.	380%	410%	415%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '10-'12 to '16-'18
Revenues	1.5%	1.0%	5.5%
"Cash Flow"	3.0%	2.0%	7.0%
Earnings	3.5%	2.5%	4.0%
Dividends	1.5%	1.5%	1.5%
Book Value	4.5%	4.0%	2.0%

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2010	21.6	26.5	29.6	25.0	102.7
2011	24.0	26.1	28.7	23.3	102.1
2012	23.5	27.4	32.3	27.1	110.4
2013	27.0	29.1	34.0	29.9	120
2014	30.0	30.0	35.0	30.0	125

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2010	.11	.31	.37	.17	.96
2011	.17	.23	.32	.12	.84
2012	.11	.23	.38	.17	.90
2013	.20	.28	.35	.17	1.00
2014	.17	.28	.40	.20	1.05

Cal-endar	QUARTERLY DIVIDENDS PAID B■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2009	.178	.178	.178	.180	.71
2010	.180	.180	.180	.183	.72
2011	.183	.183	.183	.185	.73
2012	.185	.185	.185	.1875	.74
2013	.1875	.1875	.1875		

BUSINESS: Middlesex Water Company engages in the ownership and operation of regulated water utility systems in New Jersey, Delaware, and Pennsylvania. It also operates water and wastewater systems under contract on behalf of municipal and private clients in NJ and DE. Its Middlesex System provides water services to 60,000 retail customers, primarily in Middlesex County, New Jersey. In 2012, the Middlesex System accounted for 65% of total revenues. At 12/31/12, the company had 279 employees. Incorporated: NJ. President, CEO, and Chairman: Dennis W. Doll. Officers/directors own 3.1% of the common stock; BlackRock, 6.3%; The Vanguard Group, 5.7% (4/13 proxy). Address: 1500 Ronson Road, Iselin, NJ 08830. Tel.: 732-634-1500. Internet: www.middlesexwater.com.

Historically, Middlesex Water's dividend increases have been incredibly consistent. Over the past nine years, (from 2003 to 2012), the utility has raised its annual payout by $0.01 a share.

Sometimes predictability isn't a positive. Over the past five and 10 years, respectively, the average dividend hike has been a meager 1.5%. This ranks near the bottom when compared to the other seven water utilities that *Value Line* covers.

Could Middlesex finally break its streak this quarter? Late October is usually the time when the company implements its annual dividend rate hike. With decent earnings comparisons, it's possible that Middlesex could go against convention and raise the payout by more than the traditional one-quarter of a cent per share. We are taking a show-me approach, with our figures representing the usual quarterly increase.

The utility's earnings have been improving. In the June period, Middlesex experienced its fourth-consecutive positive earnings comparison. This was mostly due to the implementation of higher rates in mid-2012, as well a better contract with the borough of Avalon, NJ, a wholesale client.

Performance in the industrial markets has impaired Middlesex. The utility lost a contract to supply water to the borough of Sayreville, NJ this past August. Another setback was the closure of a Hess oil refinery earlier in the year.

The company is targeting the residential market. Despite recently winning a contract to privatize the water system at the Dover Air Force Base in Delaware, Middlesex has budgeted $25 million a year over the next three years to improve the infrastructure of its residential business. We agree with this strategy as the residential market is both more predictable and profitable.

Middlesex shares are ranked to outperform the market in the year ahead. Some investors may also be attracted to the stock's high current yield. Those with a long-term horizon, however, can find other water utilities with higher total-return potential through the pull to 2016-2018.

James A. Flood *October 18, 2013*

(A) Diluted earnings. May not sum due to rounding. Next earnings report due early November.
(B) Dividends historically paid in mid-Feb., May, Aug., and November. ■ Div'd reinvestment plan available.
(C) In millions, adjusted for splits.
(D) Intangible assets in 2012: $9.2 million, $0.58 a share.

Company's Financial Strength	B++
Stock's Price Stability	95
Price Growth Persistence	40
Earnings Predictability	80

YORK WATER NDQ-YORW

RECENT PRICE 19.90 | P/E RATIO 25.8 (Trailing: 26.5 Median: 25.0) | RELATIVE P/E RATIO 1.47 | DIV'D YLD 2.9% | VALUE LINE

TIMELINESS	4	Lowered 10/4/13
SAFETY	2	New 7/13/13
TECHNICAL	3	Lowered 8/2/13

BETA .70 (1.00 = Market)

High:	13.4	13.5	14.0	17.9	21.0	18.5	16.5	18.0	18.0	18.1	18.5	22.0	
Low:	8.2	9.3	11.0	11.7	15.3	15.5	6.2	9.7	12.8	15.8	16.8	17.6	

Target Price Range 2016 | 2017 | 2018

2016-18 PROJECTIONS

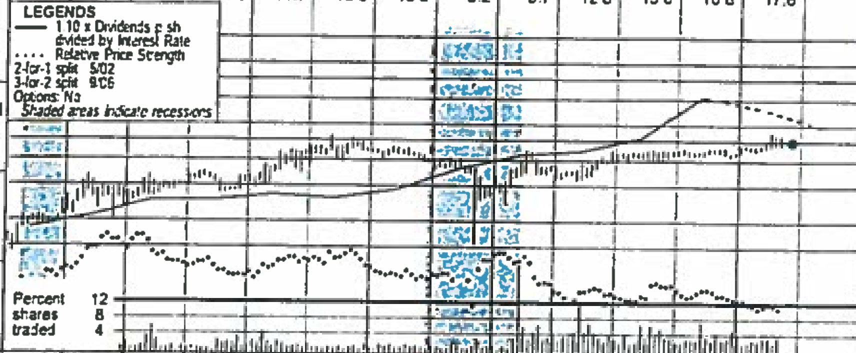
	Price	Gain	Ann'l Total Return
High	25	(+25%)	8%
Low	17	(-15%)	Nil

Insider Decisions

	N	D	J	F	M	A	M	J	J
to Buy	0	0	4	0	0	4	0	1	5
Options	0	0	0	0	0	0	0	0	0
to Sell	0	1	0	0	0	1	0	0	0

Institutional Decisions

	4Q2012	1Q2013	2Q2013
to Buy	26	33	32
to Sell	27	21	26
Hld's(000)	3178	3375	3346



% TOT. RETURN 9/13

	THIS STOCK	VL ARITH.* INDEX
1 yr	11.9	31.2
3 yr	36.1	60.1
5 yr	83.4	110.2

1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	© VALUE LINE PUB. LLC	16-18
--	--	--	--	2.05	2.05	2.17	2.18	2.58	2.56	2.79	2.89	2.95	3.07	3.18	3.21	3.40	3.50	Revenues per sh	3.55
--	--	--	--	.59	.57	.65	.65	.79	.77	.86	.88	.95	1.07	1.09	1.12	1.20	1.30	"Cash Flow" per sh	1.40
--	--	--	--	.43	.40	.47	.49	.56	.58	.57	.57	.64	.71	.71	.72	.75	.85	Earnings per sh A	.90
--	--	--	--	.34	.35	.37	.39	.42	.45	.48	.43	.51	.52	.53	.54	.55	.57	Div'd Decl'd per sh B	.65
--	--	--	--	.75	.66	1.07	2.50	1.69	1.85	1.69	2.17	1.13	.83	.74	.94	.90	.80	Cap'l Spending per sh	.90
--	--	--	--	3.79	3.90	4.06	4.65	4.85	5.84	5.97	6.14	6.92	7.19	7.45	7.73	8.05	8.35	Book Value per sh	8.60
--	--	--	--	9.46	9.55	9.63	10.33	10.40	11.20	11.27	11.37	12.56	12.69	12.79	12.92	13.00	13.20	Common Shs Outst'g C	14.00
--	--	--	--	17.8	26.9	24.5	25.7	25.3	31.2	30.3	24.6	21.9	20.7	23.9	24.4	Bold figures are	Value Line	Avg Ann'l P/E Ratio	22.5
--	--	--	--	.91	1.47	1.40	1.36	1.40	1.68	1.61	1.49	1.46	1.32	1.50	1.55	estimates		Relative P/E Ratio	1.50
--	--	--	--	4.4%	3.3%	3.2%	3.1%	2.9%	2.5%	2.8%	3.5%	3.6%	3.5%	3.1%	3.1%			Avg Ann'l Div'd Yield	3.2%

CAPITAL STRUCTURE as of 6/30/13
Total Debt $84.9 mill. Due in 5 Yrs $19.5 mill.
LT Debt $84.9 mill. LT Interest $5.2 mill.
(Total interest coverage: 2.9x)
(46% of Cap'l)

Pension Assets 12/12 $22.7 mill.
Oblig. $34.7 mill.

Pfd Stock None

Common Stock 12,912,243 shs.
as of 8/6/13

MARKET CAP: $250 million (Small Cap)

2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014		16-18
20.9	22.5	26.8	28.7	31.4	32.8	37.0	39.0	40.6	41.4	43.0	46.0	Revenues ($mill)	50.0
4.4	4.8	5.8	6.1	6.4	6.4	7.5	8.9	9.1	9.3	10.2	11.3	Net Profit ($mill)	12.6
34.8%	36.7%	35.7%	34.4%	36.5%	36.1%	37.9%	38.5%	35.3%	37.6%	36.0%	36.0%	Income Tax Rate	36.0%
--	--	--	7.2%	3.6%	10.1%	--	1.2%	1.1%	1.1%	1.0%	1.0%	AFUDC % to Net Profit	1.0%
43.4%	42.5%	44.1%	48.3%	46.5%	54.5%	45.7%	48.3%	47.1%	46.0%	45.0%	45.0%	Long-Term Debt Ratio	43.0%
56.6%	57.5%	55.9%	51.7%	53.5%	45.5%	54.3%	51.7%	52.9%	54.0%	55.0%	55.0%	Common Equity Ratio	57.0%
69.0	83.6	90.3	126.5	125.7	153.4	160.1	176.4	180.2	184.8	190	197	Total Capital ($mill)	220
116.5	140.0	155.3	174.4	191.6	211.4	222.0	229.4	233.0	240.3	245	250	Net Plant ($mill)	265
8.5%	7.6%	8.4%	6.2%	6.7%	5.7%	6.2%	6.5%	6.4%	6.4%	6.5%	7.0%	Return on Total Cap'l	7.0%
11.4%	10.0%	11.6%	9.3%	9.5%	9.2%	8.6%	9.8%	9.5%	9.3%	9.5%	10.0%	Return on Shr. Equity	10.0%
11.4%	10.0%	11.6%	9.3%	9.5%	9.2%	8.6%	9.8%	9.5%	9.3%	9.5%	10.0%	Return on Com Equity	10.0%
2.6%	2.1%	3.0%	2.2%	1.7%	1.4%	1.9%	2.7%	2.5%	2.4%	3.0%	3.0%	Retained to Com Eq	3.0%
77%	79%	74%	77%	82%	85%	78%	72%	73%	74%	71%	67%	All Div'ds to Net Prof	72%

CURRENT POSITION ($MILL.)	2011	2012	6/30/13
Cash Assets	4.0	4.0	4.2
Accounts Receivable	6.0	6.4	4.0
Other	1.4	1.2	4.0
Current Assets	11.4	11.6	12.2
Accts Payable	1.1	1.1	1.5
Debt Due	.1	.1	--
Other	4.1	4.3	4.0
Current Liab.	5.3	5.5	5.5
Fix. Chg. Cov.	160%	156%	154%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '10-'12 to '16-'18
Revenues	4.5%	3.5%	2.0%
"Cash Flow"	6.5%	6.5%	4.0%
Earnings	5.5%	4.5%	4.0%
Dividends	1.5%	3.0%	3.5%
Book Value	7.0%	6.0%	2.5%

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2010	9.0	9.7	10.5	9.8	39.0
2011	9.6	10.5	10.5	10.0	40.6
2012	9.6	10.4	11.0	10.4	41.4
2013	10.1	10.7	11.2	11.0	43.0
2014	10.5	11.5	12.2	11.8	46.0

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2010	.15	.18	.21	.17	.71
2011	.17	.19	.19	.16	.71
2012	.15	.17	.22	.18	.72
2013	.17	.18	.21	.19	.75
2014	.19	.21	.23	.22	.85

Cal-endar	QUARTERLY DIVIDENDS PAID B Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2009	.126	.126	.126	.126	.504
2010	.128	.128	.128	.128	.512
2011	.131	.131	.131	.131	.524
2012	.134	.134	.134	.134	.536
2013	.138	.138	.138	.138	

BUSINESS: The York Water Company is the oldest investor-owned regulated water utility in the United States. It has operated continuously since 1816. As of December 31, 2012, the company's average daily availability was 35.0 million gallons and its service territory had an estimated population of 189,000. Has more than 63,000 customers. Residential customers accounted for 63% of 2012 revenues; commercial and industrial (29%); other (8%). It also provides sewer billing services. Incorporated: PA. York had 103 full-time employees at 12/31/12. President/CEO: Jeffrey R. Hines. Officers/directors own 1.2% of the common stock (3/13 proxy). Address: 130 East Market Street York, Pennsylvania 17401. Telephone: (717) 845-3601. Internet: www.yorkwater.com.

There have been very few surprises at The York Water Company in the recent past. From 2010 through 2012, the company's annual share earnings varied by only $0.01 a share. The dividend was also very predictable, as it rose by just $0.01 a share annually during the same time span.

York is awaiting the outcome of a major rate case. Last May, the utility petitioned Pennsylvania regulators for a 17% rate increase (about $7.1 million in revenues a year). The request was to recoup the $49 million that York has spent since 2010 to modernize and update its aging infrastructure. In addition, along with the help of a large rate increase for wastewater customers, the added funds will help the utility replace 30 miles of pipeline and reduce water leakage for the 190,000 people it services.

We think that the outcome will be relatively reasonable. There is no doubt that the current and projected expenditures by York are essential to keeping the system operating efficiently. However, we should point out that no matter how justified utility spending is, regulators face strong political pressure not to implement significant rate hikes.

Dividend growth should remain relatively modest in the years ahead. Though we think that the company will raise its annual payout by $0.02 a share in 2014, the growth rate over the next three- to five-year period will be slightly on the low side for a water utility.

Finances are in decent shape. The equity-to-total capital ratio is healthy at a solid 54%. Still, our Financial Strength rating for York is an average B+. This metric would be higher if the company's capital base was more substantial.

There is nothing particularly noteworthy about York Water's shares. Both the equity's current yield and dividend growth prospects are in line with those of most of its peers. Moreover, the stock has performed fairly well of late and is now trading at over 25 times our 12 month share-earnings estimate. And finally, according to our proprietary Timeliness Ranking System, York shares should underperform the market averages in the upcoming six- to 12-month period.

James A. Flood *October 18, 2013*

(A) Diluted earnings. Next earnings report due early November.
(B) Dividends historically paid in mid-January, April, July, and October.
(C) In millions, adjusted for splits.

Company's Financial Strength	B+
Stock's Price Stability	90
Price Growth Persistence	75
Earnings Predictability	100

Infrastructure costs in the Water Utility Industry will rise dramatically over the coming 20 years. Consequently, larger companies are acquiring smaller ones in an effort to achieve economies of scale.

Stocks in the Water Utility Industry are ranked near the middle of the *Value Line* universe. Nevertheless, conservative investors can find appealing choices here due to favorable Safety ranks and healthy dividend payouts.

INDUSTRY TIMELINESS: 47 (of 98)

Industry Consolidation

Infrastructure costs in the water utility industry will likely soar over the next two decades. Water utility companies must constantly repair and upgrade their existing water/wastewater systems in order to comply with increasingly stringent rules issued by the Environment Protection Agency (EPA) and local regulators Many of the facilities and pipes that transport water were put in place over 100 years ago. The costs of replacing these systems is considerably higher now than they were in the past, even adjusting for inflation. Too, the ongoing depletion of nearby sources of water compels many of the utilities to obtain water from more-distant, more-expensive sources. Water is difficult and costly to transport because it is heavy and incompressible. Nevertheless, utilities must continue to keep pace with the rising demand for drinking water from growing residential and industrial customers. Recent estimates are that it will cost hundreds of billions of dollars to replace and upgrade failing water infrastructures over the next 20 years. This amounts to more than the entire current assets of the water industry in the United States. Much of these costs will likely be financed by federal spending and higher water rates. Nonetheless, water utilities are going to have to ante up much greater capital investments over the coming years.

The costs of staying in compliance with drinking water laws are especially onerous for smaller regional companies because these companies have fewer customers over which to spread their costs. Small and mid-sized water utilities tend to welcome takeover offers from larger, better-capitalized companies so that they can utilize the bigger firm's superior resources. For instance, the EPA's new rules on the allowable levels of arsenic in drinking water (10 parts per billion by January, 2006) is compelling some smaller utilities to merge with larger ones in an effort to remain in compliance with the new standards. By purchasing these smaller entities, large utilities seek to achieve economies of scale. Also, a bigger company gains greater geographic diversity that can reduce its susceptibility to unfavorable weather patterns and potentially burdensome local regulators. For example, the regulatory climate in California has been extremely costly for utilities in the past few years, so companies have been actively looking for acquisition targets outside of the state.

Recent Regulatory Issues

Budget deficits at the federal, state, and local levels ought to hurt water utilities. Lawmakers will probably resist committing scarce public funds towards major infrastructure projects. This is especially frustrating for water companies since it comes at a time when they are dishing out funds to improve security and protect their water-distribution systems. We expect the industry to lobby for grants, changes in the tax code, and government loans. Also, there is a new bill in the U.S. House of Representatives that would make compliance with federal drinking water standards a defense in lawsuits involving contaminants covered by such standards. If enacted into law, this rule could reduce water companies' legal expenses since it would make it much harder for customers to successfully sue for contaminated water.

SDWA Regulations

The Safe Drinking Water Act (SDWA) of 1974 (amended in 1996) authorizes the EPA to work with state and local governments to periodically test for impurities in drinking water. The EPA mandates the acceptable level of certain contaminants per a specified amount of water. Water utilities routinely spend large portions of their annual capital budgets on efforts to remain in compliance with SDWA guidelines. These companies must also comply with the 1972 Clean Water Act, and numerous other state and local laws.

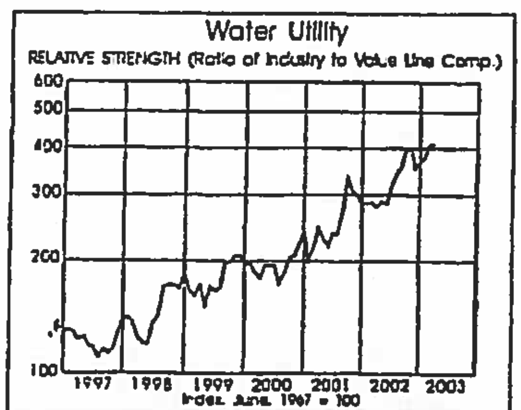
Investment Advice

The water utility stocks in this review are unlikely to outperform the year-ahead market. Nonetheless, they offer above-average Safety ranks, attractive dividend yields, and decent risk-adjusted total-return potential.

Joseph Espaillat

Composite Statistics: Water Utility Industry

1999	2000	2001	2002	2003	2004		06-08
677.2	704.3	751.8	784.4	[illegible]	[illegible]	Revenues ($mill)	[illegible]
72.1	80.9	85.1	105.6	110	130	Net Profit ($mill)	160
40.0%	41.2%	40.2%	38.6%	38.5%	38.5%	Income Tax Rate	40.0%
--	--	--	--	NMF	.5%	AFUDC % to Net Profit	.5%
51.1%	50.3%	52.4%	53.5%	53.5%	57.5%	Long-Term Debt Ratio	51.5%
48.3%	49.3%	47.2%	45.5%	46.5%	42.5%	Common Equity Ratio	48.5%
1444.7	1651.0	1640.7	1871.6	2200	[illegible]	Total Capital ($mill)	[illegible]
2183.3	2342.5	2532.3	2751.1	[illegible]	3180	Net Plant ($mill)	[illegible]
7.6%	7.0%	6.6%	7.4%	6.5%	7.5%	Return on Total Cap'l	7.5%
11.5%	10.7%	10.6%	11.2%	10.5%	10.5%	Return on Shr. Equity	12.5%
11.5%	10.8%	10.7%	11.2%	10.5%	11.5%	Return on Com Equity	12.5%
3.6%	3.6%	3.3%	3.5%	3.5%	4.5%	Retained to Com Eq	5.5%
68%	67%	69%	68%	75%	65%	All Div'ds to Net Prof	64%
19.5	16.6	22.0	21.5	*Bold figures are Value Line estimates*		Avg Ann'l P/E Ratio	12.3
1.11	1.21	1.16	1.17			Relative P/E Ratio	.90
3.5%	3.5%	3.1%	3.1%			Avg Ann'l Div'd Yield	3.0%



OFFICE OF REGULATORY STAFF

CAROLINA WATER SERVICE, INC.

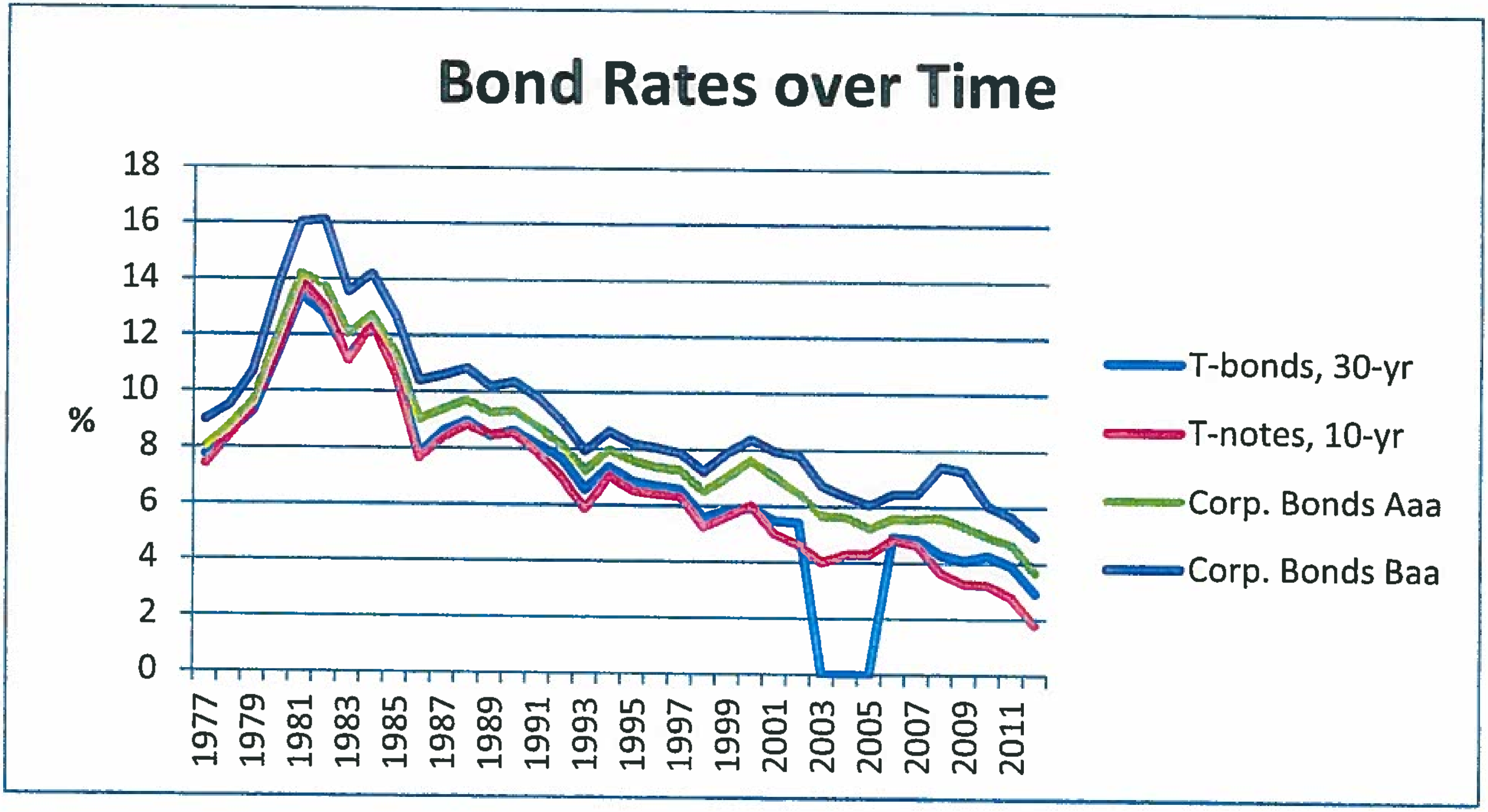
Docket #2013-275-WS

Consumer Price Index - Urban Consumers

CPI-U 1982-84=100

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Annual % Δ
1995	150.3	150.9	151.4	151.9	152.2	152.5	152.5	152.9	153.2	153.7	153.6	153.5	152.4	
1996	154.4	154.9	155.7	156.3	156.6	156.7	157.0	157.3	157.8	158.3	158.6	158.6	156.9	
1997	159.1	159.6	160.0	160.2	160.1	160.3	160.5	160.8	161.2	161.6	161.5	161.3	160.5	2.95%
1998	161.6	161.9	162.2	162.5	162.8	163.0	163.2	163.4	163.6	164.0	164.0	163.9	163.0	2.29%
1999	164.3	164.5	165.0	166.2	166.2	166.2	166.7	167.1	167.9	168.2	168.3	168.3	166.6	1.56%
2000	168.8	169.8	171.2	171.3	171.5	172.4	172.8	172.8	173.7	174.0	174.1	174.0	172.2	2.21%
2001	175.1	175.8	176.2	176.9	177.7	178.0	177.5	177.5	178.3	177.7	177.4	176.7	177.1	3.36%
2002	177.1	177.8	178.8	179.8	179.8	179.9	180.1	180.7	181.0	181.3	181.3	180.9	179.9	2.85%
2003	181.7	183.1	184.2	183.8	183.5	183.7	183.9	184.6	185.2	185.0	184.5	184.3	184.0	1.58%
2004	185.2	186.2	187.4	188.0	189.1	189.7	189.4	189.5	189.9	190.9	191.0	190.3	188.9	2.28%
2005	190.7	191.8	193.3	194.6	194.4	194.5	195.4	196.4	198.8	199.2	197.6	196.8	195.3	2.66%
2006	198.3	198.7	199.8	201.5	202.5	202.9	203.5	203.9	202.9	201.8	201.5	201.8	201.6	3.39%
2007	202.4	203.5	205.4	206.7	207.9	208.4	208.3	207.9	208.5	210.2	208.9	210.0	207.3	3.23%
2008	211.1	211.7	213.5	214.8	216.6	218.8	220.0	219.1	218.8	216.6	212.4	210.2	215.3	2.85%
2009	211.1	212.2	212.7	213.2	213.9	215.7	215.4	215.8	216.0	216.2	216.3	215.9	214.5	3.84%
2010	216.7	216.7	217.6	218.0	218.2	218.0	218.0	218.3	218.4	218.7	218.8	219.2	218.1	-0.36%
2011	220.2	221.3	223.5	224.9	226.0	225.7	225.9	226.5	226.9	226.4	226.2	225.7	224.9	1.64%
2012	226.7	227.7	229.4	230.1	229.8	229.5	229.1	230.4	231.4	231.3	230.2	229.6	229.6	3.16%
2013	230.3	232.2	232.8	232.5	232.9	233.5	233.6	233.9	234.1					2.07%
	1.59%	1.98%	1.47%	1.06%	1.36%	1.75%	1.96%	1.52%	1.18%	Month over Same Month Last Year				

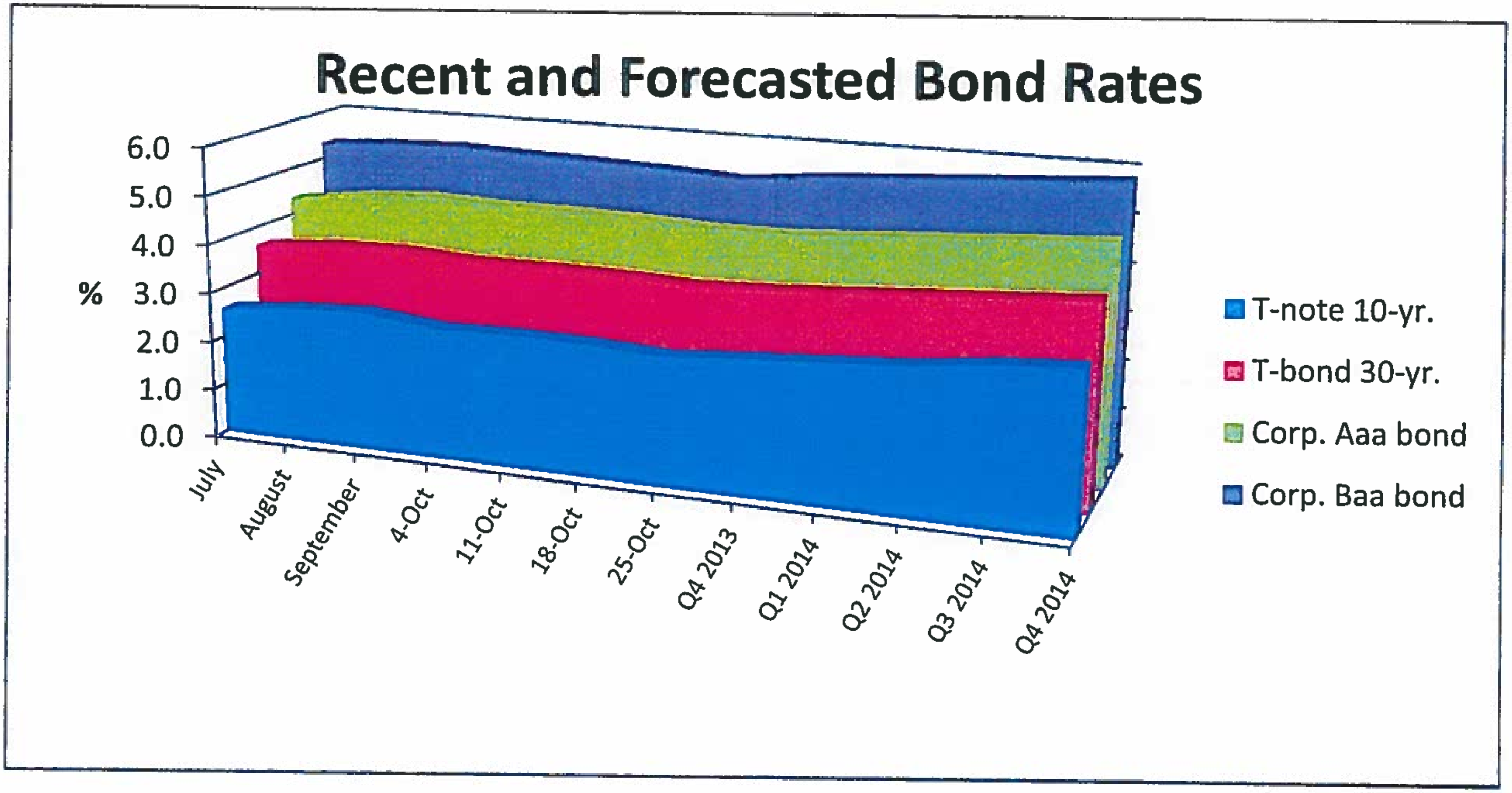
Source: U.S. Dept. of Labor, Bureau of Labor Statistics; except last line and last column are calculated



Corporate bonds are Moody's seasoned bond rates

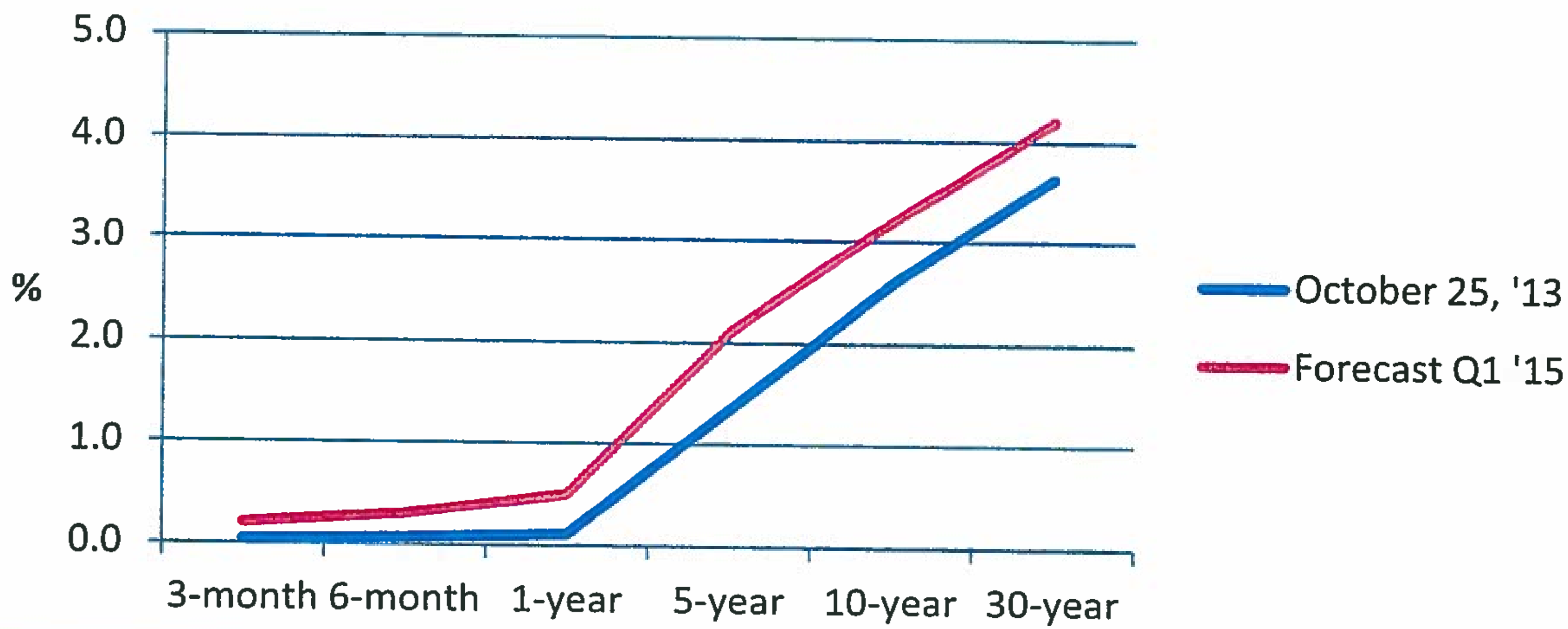
30-yr T-bonds were temporarily discontinued

Source: St Louis Federal Reserve



Source: Blue Chip Financial Forecasts, November 1, 2013

U.S. Treasuries, Yield Curve, Recent & Forecasted



Source: Blue Chip Financial Forecasts, November 1, 2013

Note: Compare with actual forecasted inflation, Exhibit DHC-12

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Carolina Water Service, Inc.
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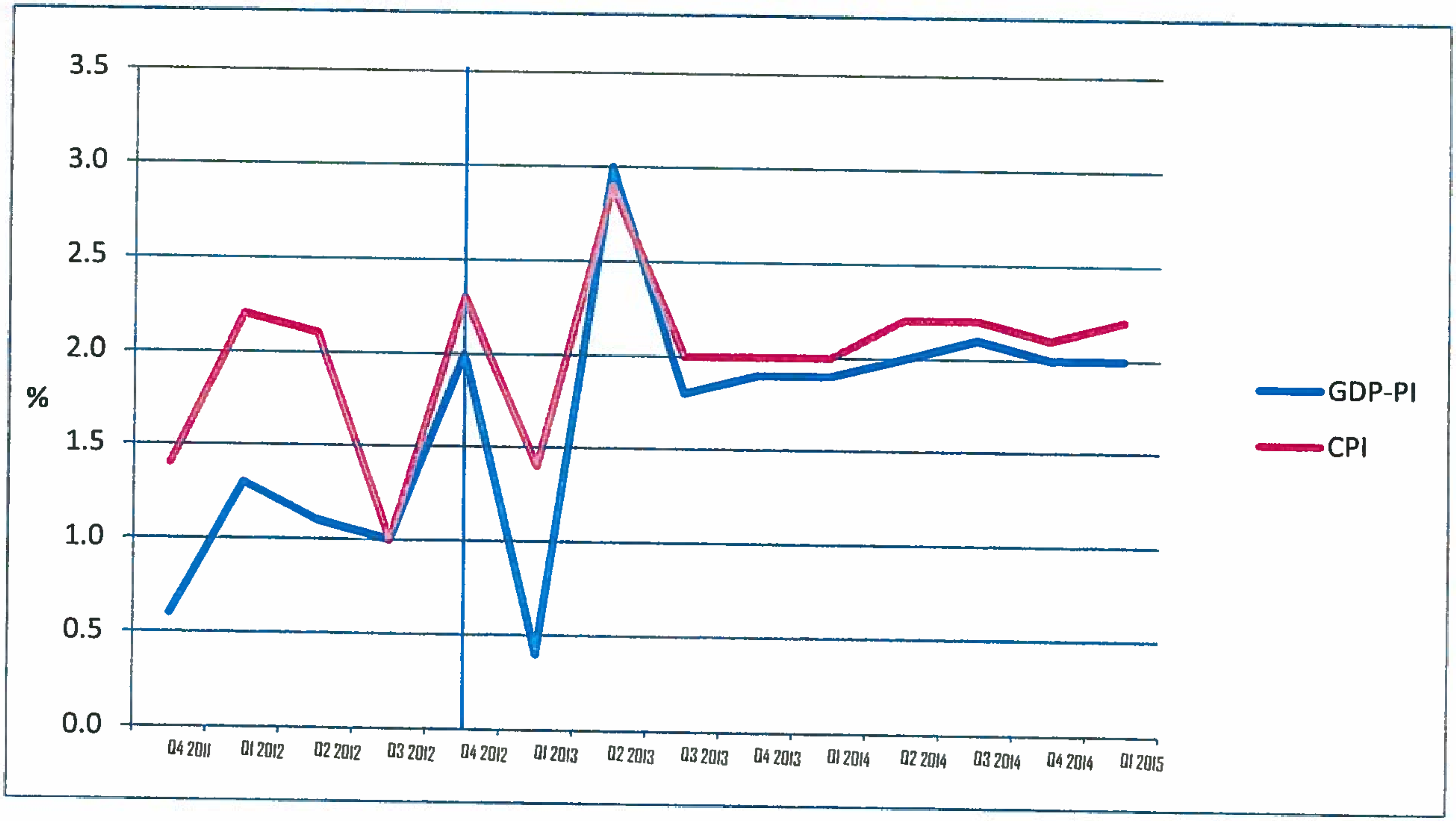

Source: *Blue Chip Financial Forecsts* , November 1, 2013, p.2

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CEM Analysis
Docket #2013-275-WS

Company	Industry Name	Beta	Book Value Growth 10-Year	Beta 10-Year	Proj Book Value Growth Rate
Crown Holdings	Packaging & Container	0.85	-25.00	0.83	84.00
Int'l Business Mach.	Computers/Peripherals	0.85	3.50	0.75	23.00
Varian Medical Sys.	Med Supp Invasive	0.85	15.50	0.87	19.00
Copart, Inc.	Retail Automotive	0.85	10.00	0.90	17.00
ACI Worldwide	IT Services	0.85	7.00	0.72	14.00
Aaron's Inc.	Retail Store	0.85	14.50	0.80	13.50
Cyberonics	Med Supp Invasive	0.85	12.50	0.68	13.50
3M Company	Diversified Co.	0.85	11.50	0.89	13.50
Rollins, Inc.	Industrial Services	0.85	15.00	0.55	13.00
Thoratec Corp.	Med Supp Invasive	0.85	7.50	0.75	13.00
Microsoft Corp.	Computer Software	0.85	5.00	0.93	13.00
United Parcel Serv.	Air Transport	0.85	-3.50	0.86	13.00
Celgene Corp.	Drug	0.85	29.50	0.62	12.50
CACI Int'l	IT Services	0.85	17.50	0.86	12.50
Cerner Corp.	Healthcare Information	0.85	17.50	0.92	12.50
Henry (Jack) & Assoc.	IT Services	0.85	13.00	0.73	12.00
CSG Systems Int'l	IT Services	0.85	6.00	0.88	10.50
Knight Transportation	Trucking	0.85	12.00	0.71	9.00
Amer. Tower 'A'	Wireless Networking	0.85	-4.00	0.63	9.00
Stryker Corp.	Med Supp Invasive	0.85	21.50	0.97	8.50
Mattel, Inc.	Recreation	0.85	7.50	0.94	8.00
GameStop Corp.	Retail (Hardlines)	0.85	24.00	0.99	7.50
CVS Caremark Corp.	Pharmacy Services	0.85	18.00	0.82	7.50
ManTech Int'l 'A'	IT Services	0.85	14.00	0.54	6.00
Paychex, Inc.	IT Services	0.85	7.50	0.87	6.00
Fred's Inc. 'A'	Retail Store	0.85	7.00	0.99	6.00
Landauer, Inc.	Precision Instrument	0.85	9.50	0.80	4.50
Pantry (The), Inc.	Retail/Wholesale Food	0.85	8.00	0.86	4.50
Bemis Co.	Packaging & Container	0.85	7.00	0.71	4.50
Analogic Corp.	Precision Instrument	0.85	4.00	0.77	4.00

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Company	Industry Name	Beta	Book Value Growth 10-Year	Beta 10-Year	Proj Book Value Growth Rate
Washington Post	Newspaper	0.85	7.00	0.97	2.50
Merck & Co.	Drug	0.85	9.50	0.68	1.50
NutriSystem Inc.	Food Processing	0.85	33.00	0.95	-1.50
Lockheed Martin	Aerospace/Defense	0.85	-11.00	0.86	-8.00
Sturm, Ruger & Co.	Recreation	0.80	0.50	0.56	25.00
Alexion Pharmac.	Drug	0.80	11.00	0.70	22.00
Ross Stores	Retail (Softlines)	0.80	14.50	0.70	20.50
PetSmart, Inc.	Retail (Hardlines)	0.80	12.00	0.77	17.00
Ecolab Inc.	Chemical (Specialty)	0.80	16.50	0.66	16.00
Advance Auto Parts	Retail Automotive	0.80	16.00	0.62	15.50
TJX Companies	Retail (Softlines)	0.80	14.00	0.58	15.50
Int'l Flavors & Frag.	Chemical (Specialty)	0.80	8.50	0.88	15.50
Papa John's Int'l	Restaurant	0.80	8.50	0.62	14.00
Computer Prog. & Sys.	Healthcare Information	0.80	12.50	0.50	13.50
ResMed Inc.	Med Supp Non-Invasive	0.80	22.50	0.67	13.00
Alliant Techsystems	Aerospace/Defense	0.80	13.00	0.85	13.00
OSI Systems	Precision Instrument	0.80	9.00	0.99	12.00
Heartland Express	Trucking	0.80	4.50	0.66	11.50
Cubist Pharm.	Drug	0.80	19.00	0.71	11.00
NIKE, Inc. 'B'	Shoe	0.80	12.50	0.84	11.00
Synopsys, Inc.	Computer Software	0.80	10.50	0.80	10.50
Chemed Corp.	Diversified Co.	0.80	8.00	0.51	10.50
MAXIMUS Inc.	Industrial Services	0.80	6.50	0.81	10.50
Cardinal Health	Med Supp Non-Invasive	0.80	3.50	0.78	10.50
Schein (Henry)	Med Supp Non-Invasive	0.80	13.00	0.74	10.00
Genuine Parts	Auto Parts	0.80	3.50	0.76	9.50
Walgreen Co.	Pharmacy Services	0.80	13.00	0.97	8.50
Automatic Data Proc.	IT Services	0.80	4.50	0.66	8.00
West Pharmac. Svcs.	Med Supp Non-Invasive	0.80	11.50	0.83	7.50
Lilly (Eli)	Drug	0.80	6.50	0.69	7.50

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Company	Industry Name	Beta	Book Value Growth 10-Year	Beta 10-Year	Proj Book Value Growth Rate
Forrester Research	Information Services	0.80	3.50	0.88	7.50
Healthcare Svcs.	Industrial Services	0.80	6.50	0.58	6.50
Teleflex Inc.	Med Supp Invasive	0.80	8.50	0.90	6.00
Forest Labs.	Drug	0.80	15.50	0.75	4.00
Waste Management	Environmental	0.80	4.50	0.61	3.50
World Wrestling Ent.	Entertainment	0.80	-2.00	0.73	2.00
Boston Beer 'A'	Beverage	0.75	12.50	0.71	21.00
ITT Educational	Educational Services	0.75	12.50	0.70	21.00
Myriad Genetics	Biotechnology	0.75	10.50	0.61	17.50
Gilead Sciences	Drug	0.75	32.50	0.53	16.00
Carriage Services	Funeral Services	0.75	3.00	0.95	13.00
Exxon Mobil Corp.	Petroleum (Integrated)	0.75	12.00	0.59	11.00
Actavis plc	Drug	0.75	6.00	0.48	11.00
McKesson Corp.	Med Supp Non-Invasive	0.75	8.50	0.74	10.50
United Natural Foods	Retail/Wholesale Food	0.75	17.00	0.81	10.00
IAC/InterActiveCorp	Internet	0.75	-7.00	0.78	9.00
Waste Connections	Environmental	0.75	12.00	0.54	8.50
Biogen Idec Inc.	Drug	0.75	15.50	0.86	8.00
Quest Diagnostics	Medical Services	0.75	13.00	0.57	8.00
Raytheon Co.	Aerospace/Defense	0.75	-1.00	0.69	8.00
Owens & Minor	Med Supp Non-Invasive	0.75	12.00	0.48	7.50
Spartan Stores	Retail/Wholesale Food	0.75	1.00	0.57	7.50
Pfizer, Inc.	Drug	0.75	14.50	0.72	7.00
Greatbatch, Inc.	Electronics	0.75	8.50	0.85	6.50
Village Super Market	Retail/Wholesale Food	0.75	8.50	0.55	6.00
FTI Consulting	Industrial Services	0.75	19.00	0.55	5.50
Endo Health Solns.	Drug	0.75	17.00	0.70	4.50
Perrigo Co.	Drug	0.75	13.50	0.59	4.50
Tootsie Roll Ind.	Food Processing	0.75	4.50	0.71	4.00
PetMed Express	Pharmacy Services	0.75	40.50	0.90	0.50

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Company	Industry Name	Beta	Book Value Growth 10-Year	Beta 10-Year	Proj Book Value Growth Rate
Casey's Gen'l Stores	Retail/Wholesale Food	0.70	6.00	0.64	18.50
Monster Beverage	Beverage	0.70	40.50	0.53	18.00
Edwards Lifesciences	Med Supp Invasive	0.70	11.50	0.52	16.00
Silgan Holdings	Packaging & Container	0.70	43.00	0.55	15.00
Monro Muffler Brake	Retail Automotive	0.70	10.50	0.53	14.50
DaVita HealthCare	Medical Services	0.70	26.50	0.55	13.50
Laboratory Corp.	Medical Services	0.70	12.50	0.61	12.00
O'Reilly Automotive	Retail Automotive	0.70	14.50	0.49	11.50
Amgen	Biotechnology	0.70	12.50	0.53	10.50
Comtech Telecom.	Telecom. Equipment	0.70	20.50	0.64	10.00
Sysco Corp.	Retail/Wholesale Food	0.70	9.50	0.75	10.00
Baxter Int'l Inc.	Med Supp Invasive	0.70	8.50	0.54	10.00
Techne Corp.	Biotechnology	0.70	13.50	0.68	8.00
J&J Snack Foods	Food Processing	0.70	10.50	0.77	8.00
AmerisourceBergen	Med Supp Non-Invasive	0.70	7.50	0.68	8.00
DeVry Inc.	Educational Services	0.70	16.50	0.59	7.00
Costco Wholesale	Retail Store	0.70	9.50	0.71	6.50
Bristol-Myers Squibb	Drug	0.70	6.00	0.58	6.00
WD-40 Co.	Household Products	0.70	9.00	0.68	4.00
AT&T Inc.	Telecom. Services	0.70	6.50	0.60	4.00
Brown-Forman 'B'	Beverage	0.70	7.00	0.69	3.50
Nash Finch Co.	Retail/Wholesale Food	0.70	5.50	0.69	3.00
EarthLink, Inc.	Internet	0.70	11.50	0.97	-6.50
Coca-Cola Bottling	Beverage	0.65	16.00	0.48	20.00
Sherwin-Williams	Retail Building Supply	0.65	5.50	0.68	19.50
Becton, Dickinson	Med Supp Invasive	0.65	10.00	0.69	10.00
Johnson & Johnson	Med Supp Non-Invasive	0.65	11.50	0.54	9.50
ConAgra Foods	Food Processing	0.65	3.50	0.69	9.50
Harris Teeter Super.	Retail/Wholesale Food	0.65	7.00	0.77	9.00
Verizon Communic.	Telecom. Services	0.65	0.50	0.53	7.00

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Company	Industry Name	Beta	Book Value Growth 10-Year	Beta 10-Year	Proj Book Value Growth Rate	Averages
Weis Markets	Retail/Wholesale Food	0.65	3.00	0.68	6.00	
Coca-Cola	Beverage	0.65	12.50	0.55	5.50	
Smucker (J.M.)	Food Processing	0.65	12.50	0.58	5.00	
ICU Medical	Med Supp Invasive	0.65	11.00	0.53	5.00	
Snyder's-Lance	Food Processing	0.65	7.50	0.73	4.00	
Kroger Co.	Retail/Wholesale Food	0.60	6.00	0.52	14.00	
Sanderson Farms	Food Processing	0.60	14.00	0.55	13.50	
PepsiCo, Inc.	Beverage	0.60	10.50	0.46	10.00	
Procter & Gamble	Household Products	0.60	17.50	0.50	5.50	
McDonald's Corp.	Restaurant	0.60	6.50	0.50	4.50	
	Mean	*0.76*	10.79		10.40	
	Median	*0.80*	10.50		9.75	
	Unstratified average	*0.78*	**10.65**		**10.08**	**10.36**
	Averages by β Stratum					
	>.79	*0.83*	9.74		11.48	
	>.69 & <.80	*0.73*	12.79		9.30	
	<.70	*0.64*	9.12		9.26	
	Stratified, unweighted avg.	*0.73*	**10.55**		**10.01**	**10.28**
						10.32
	Stratified, weighted, avg.	*0.70*	**10.67**		**9.53**	**10.10**

CEM Result **10.21**

Press Release

FEDERAL RESERVE press release

Release Date: July 31, 2013

For immediate release

Information received since the Federal Open Market Committee met in June suggests that economic activity expanded at a modest pace during the first half of the year. Labor market conditions have shown further improvement in recent months, on balance, but the unemployment rate remains elevated. Household spending and business fixed investment advanced, and the housing sector has been strengthening, but mortgage rates have risen somewhat and fiscal policy is restraining economic growth. Partly reflecting transitory influences, inflation has been running below the Committee's longer-run objective, but longer-term inflation expectations have remained stable.

Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. The Committee expects that, with appropriate policy accommodation, economic growth will pick up from its recent pace and the unemployment rate will gradually decline toward levels the Committee judges consistent with its dual mandate. The Committee sees the downside risks to the outlook for the economy and the labor market as having diminished since the fall. The Committee recognizes that inflation persistently below its 2 percent objective could pose risks to economic performance, but it anticipates that inflation will move back toward its objective over the medium term.

To support a stronger economic recovery and to help ensure that inflation, over time, is at the rate most consistent with its dual mandate, the Committee decided to continue purchasing additional agency mortgage-backed securities at a pace of $40 billion per month and longer-term Treasury securities at a pace of $45 billion per month. The Committee is maintaining its existing policy of reinvesting principal payments from its holdings of agency debt and agency mortgage-backed securities in agency mortgage-backed securities and of rolling over maturing Treasury securities at auction. Taken together, these actions should maintain downward pressure on longer-term interest rates, support mortgage markets, and help to make broader financial conditions more accommodative.

The Committee will closely monitor incoming information on economic and financial developments in coming months. The Committee will continue its purchases of Treasury and agency mortgage-backed securities, and employ its other policy tools as appropriate, until the outlook for the labor market has improved substantially in a context of price stability. The Committee is prepared to increase or reduce the pace of its purchases to maintain appropriate policy accommodation as the outlook for the labor market or inflation changes. In determining the size, pace, and composition of its asset purchases, the Committee will continue to take appropriate account of the likely efficacy and costs of such purchases as well as the extent of progress toward its economic objectives.

To support continued progress toward maximum employment and price stability, the Committee today reaffirmed its view that a highly accommodative stance of monetary policy will remain appropriate for a considerable time after the asset purchase program ends and the economic recovery strengthens. In particular, the Committee decided to keep the target range for the federal funds rate at 0 to 1/4 percent and currently anticipates that this exceptionally low range for the federal funds rate will be appropriate at least as long as the unemployment rate remains above 6-1/2 percent, inflation between one and two years ahead is projected to be no more than a half percentage point above the Committee's 2 percent longer-run goal, and longer-term inflation expectations continue to be well anchored. In determining how long to maintain a highly accommodative stance of monetary policy, the Committee will also consider other information, including additional measures of labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial developments. When the Committee decides to begin to remove policy accommodation, it will take a balanced approach consistent with its longer-run goals of maximum employment and inflation of 2 percent.

Voting for the FOMC monetary policy action were: Ben S. Bernanke, Chairman; William C. Dudley, Vice Chairman; James Bullard; Elizabeth A. Duke; Charles L. Evans; Jerome H. Powell; Sarah Bloom Raskin; Eric S. Rosengren; Jeremy C. Stein; Daniel K. Tarullo; and Janet L. Yellen. Voting against the action was Esther L. George, who was concerned that the continued high level of monetary accommodation increased the risks of future economic and financial imbalances and, over time, could cause an increase in long-term inflation expectations.

Press Release

FEDERAL RESERVE press release

Release Date: September 18, 2013

For immediate release

Information received since the Federal Open Market Committee met in July suggests that economic activity has been expanding at a moderate pace. Some indicators of labor market conditions have shown further improvement in recent months, but the unemployment rate remains elevated. Household spending and business fixed investment advanced, and the housing sector has been strengthening, but mortgage rates have risen further and fiscal policy is restraining economic growth. Apart from fluctuations due to changes in energy prices, inflation has been running below the Committee's longer-run objective, but longer-term inflation expectations have remained stable.

Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. The Committee expects that, with appropriate policy accommodation, economic growth will pick up from its recent pace and the unemployment rate will gradually decline toward levels the Committee judges consistent with its dual mandate. The Committee sees the downside risks to the outlook for the economy and the labor market as having diminished, on net, since last fall, but the tightening of financial conditions observed in recent months, if sustained, could slow the pace of improvement in the economy and labor market. The Committee recognizes that inflation persistently below its 2 percent objective could pose risks to economic performance, but it anticipates that inflation will move back toward its objective over the medium term.

Taking into account the extent of federal fiscal retrenchment, the Committee sees the improvement in economic activity and labor market conditions since it began its asset purchase program a year ago as consistent with growing underlying strength in the broader economy. However, the Committee decided to await more evidence that progress will be sustained before adjusting the pace of its purchases. Accordingly, the Committee decided to continue purchasing additional agency mortgage-backed securities at a pace of $40 billion per month and longer-term Treasury securities at a pace of $45 billion per month. The Committee is maintaining its existing policy of reinvesting principal payments from its holdings of agency debt and agency mortgage-backed securities in agency mortgage-backed securities and of rolling over maturing Treasury securities at auction. Taken together, these actions should maintain downward pressure on longer-term interest rates, support mortgage markets, and help to make broader financial conditions more accommodative, which in turn should promote a stronger economic recovery and help to ensure that inflation, over time, is at the rate most consistent with the Committee's dual mandate.

The Committee will closely monitor incoming information on economic and financial developments in coming months and will continue its purchases of Treasury and agency mortgage-backed securities, and employ its other policy tools as appropriate, until the outlook for the labor market has improved substantially in a context of price stability. In judging when to moderate the pace of asset purchases, the Committee will, at its coming meetings, assess whether incoming information continues to support the Committee's expectation of ongoing improvement in labor market conditions and inflation moving back toward its longer-run objective. Asset purchases are not on a preset course, and the Committee's decisions about their pace will remain contingent on the Committee's economic outlook as well as its assessment of the likely efficacy and costs of such purchases.

To support continued progress toward maximum employment and price stability, the Committee today reaffirmed its view that a highly accommodative stance of monetary policy will remain appropriate for a considerable time after the asset purchase program ends and the economic recovery strengthens. In particular, the Committee decided to keep the target range for the federal funds rate at 0 to 1/4 percent and currently anticipates that this exceptionally low range for the federal funds rate will be appropriate at least as long as the unemployment rate remains above 6-1/2 percent, inflation between one and two years ahead is projected to be no more than a half percentage point above the Committee's 2 percent longer-run goal, and longer-term inflation expectations continue to be well anchored. In determining how long to maintain a highly accommodative stance of monetary policy, the Committee will also consider other information, including additional measures of labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial developments. When the Committee decides to begin to remove policy accommodation, it will take a balanced approach consistent with its longer-run goals of maximum employment and inflation of 2 percent.

Voting for the FOMC monetary policy action were: Ben S. Bernanke, Chairman; William C. Dudley, Vice Chairman; James Bullard; Charles L. Evans; Jerome H. Powell; Eric S. Rosengren; Jeremy C. Stein; Daniel K. Tarullo; and Janet L. Yellen. Voting against the action was Esther L. George, who was concerned that the continued high level of monetary accommodation increased the risks of future economic and financial imbalances and, over time, could cause an increase in long-term inflation expectations.

Office of Regulatory Staff
Carolina Water Service, Inc.
Docket #2013-275-WS

Millions of dollars

Reserve Bank credit, related items, and reserve balances of depository institutions at Federal Reserve Banks	Averages of daily figures: Week ended Nov 6, 2013	Change from week ended Oct 30, 2013	Change from week ended Nov 7, 2012	Wednesday Nov 6, 2013
Reserve Bank credit	3,802,905	+ 7,585	+1,019,131	3,808,368
Securities held outright[1]	3,573,291	+ 6,900	+ 989,439	3,578,326
U.S. Treasury securities	2,120,518	+ 7,881	+ 470,623	2,125,552
Bills[2]	0	0	0	0
Notes and bonds, nominal[2]	2,018,334	+ 7,853	+ 450,809	2,023,358
Notes and bonds, inflation-indexed[2]	88,589	0	+ 16,645	88,589
Inflation compensation[3]	13,595	+ 28	+ 3,169	13,605
Federal agency debt securities[2]	59,080	0	- 22,822	59,080
Mortgage-backed securities[4]	1,393,693	- 981	+ 541,638	1,393,694
Unamortized premiums on securities held outright[5]	205,620	+ 181	+ 45,692	205,680
Unamortized discounts on securities held outright[5]	-8,495	- 138	- 6,878	-8,689
Repurchase agreements[6]	0	0	0	0
Loans	188	- 45	- 984	181
Primary credit	6	- 11	- 3	2
Secondary credit	1	+ 1	+ 1	0
Seasonal credit	82	- 34	+ 34	79
Term Asset-Backed Securities Loan Facility[7]	100	0	- 1,014	100
Other credit extensions	0	0	0	0
Net portfolio holdings of Maiden Lane LLC[8]	1,515	+ 18	- 57	1,516
Net portfolio holdings of Maiden Lane II LLC[9]	64	0	+ 3	64
Net portfolio holdings of Maiden Lane III LLC[10]	22	0	- 1	22
Net portfolio holdings of TALF LLC[11]	111	0	- 744	110
Float	-475	+ 78	+ 312	-827
Central bank liquidity swaps[12]	272	0	- 12,193	272
Other Federal Reserve assets[13]	30,794	+ 592	+ 4,542	31,712
Foreign currency denominated assets[14]	24,119	- 378	- 1,322	24,129
Gold stock	11,041	0	0	11,041
Special drawing rights certificate account	5,200	0	0	5,200
Treasury currency outstanding[15]	45,392	+ 14	+ 690	45,392
Total factors supplying reserve funds	3,888,657	+ 7,221	+1,018,499	3,894,129

Note: Components may not sum to totals because of rounding. Footnotes appear at the end of the table.

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Carolina Water Service, Inc.
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1. Factors Affecting Reserve Balances of Depository Institutions (continued)

Millions of dollars

ɪserve Bank credit, related items, and ɜerve balances of depository institutions at deral Reserve Banks	Averages of daily figures			Wednesday Nov 6, 2013
	Week ended Nov 6, 2013	Change from week ended		
		Oct 30, 2013	Nov 7, 2012	
Currency in circulation[15]	1,218,863	+ 1,637	+ 74,405	1,220,698
Reverse repurchase agreements[16]	112,147	+ 631	+ 16,060	110,809
Foreign official and international accounts	106,280	- 1,768	+ 10,193	104,094
Others	5,867	+ 2,399	+ 5,867	6,715
Treasury cash holdings	206	+ 10	+ 59	209
Deposits with F.R. Banks, other than reserve balances	52,743	- 9,694	- 1,349	49,007
Term deposits held by depository institutions	0	0	0	0
U.S. Treasury, General Account	34,358	+ 2,552	+ 6,356	30,596
Foreign official	8,654	+ 1	+ 2,753	8,654
Other	9,730	- 12,248	- 10,460	9,758
Other liabilities and capital[17]	64,111	- 1,033	- 1,317	63,372
Total factors, other than reserve balances, absorbing reserve funds	1,448,069	- 8,450	+ 87,857	1,444,095
Reserve balances with Federal Reserve Banks	2,440,588	+ 15,671	+ 930,643	2,450,034

Note: Components may not sum to totals because of rounding.

1. Includes securities lent to dealers under the overnight securities lending facility; refer to table 1A.
2. Face value of the securities.
3. Compensation that adjusts for the effect of inflation on the original face value of inflation-indexed securities.
4. Guaranteed by Fannie Mae, Freddie Mac, and Ginnie Mae. The current face value shown is the remaining principal balance of the securities.
5. Reflects the premium or discount, which is the difference between the purchase price and the face value of the securities that has not been amortized. For U.S. Treasury and Federal agency debt securities, amortization is on a straight-line basis. For mortgage-backed securities, amortization is on an effective-interest basis.
6. Cash value of agreements.
7. Includes credit extended by the Federal Reserve Bank of New York to eligible borrowers through the Term Asset-Backed Securities Loan Facility.
8. Refer to table 4 and the note on consolidation accompanying table 9.
9. Refer to table 5 and the note on consolidation accompanying table 9.
10. Refer to table 6 and the note on consolidation accompanying table 9.
11. Refer to table 7 and the note on consolidation accompanying table 9.
12. Dollar value of foreign currency held under these agreements valued at the exchange rate to be used when the foreign currency is returned to the foreign central bank. This exchange rate equals the market exchange rate used when the foreign currency was acquired from the foreign central bank.
13. Includes accrued interest, which represents the daily accumulation of interest earned, and other accounts receivable. Also, includes Reserve Bank premises and equipment net of allowances for depreciation.
14. Revalued daily at current foreign currency exchange rates.
15. Estimated.
16. Cash value of agreements, which are collateralized by U.S. Treasury securities, federal agency debt securities, and mortgage-backed securities.
17. Includes the liabilities of Maiden Lane LLC, Maiden Lane II LLC, Maiden Lane III LLC, and TALF LLC to entities other than the Federal Reserve Bank of New York, including lial that have recourse only to the portfolio holdings of these LLCs. Refer to table 4 through table 7 and the note on consolidation accompanying table 9. Also includes the liability fo interest on Federal Reserve notes due to U.S. Treasury. Refer to table 8 and table 9.

Sources: Federal Reserve Banks and the U.S. Department of the Treasury.

Carolina Water Service, Inc.
Docket #2013-275-WS

Press Release

FEDERAL RESERVE press release

Release Date: October 30, 2013

For immediate release

Information received since the Federal Open Market Committee met in September generally suggests that economic activity has continued to expand at a moderate pace. Indicators of labor market conditions have shown some further improvement, but the unemployment rate remains elevated. Available data suggest that household spending and business fixed investment advanced, while the recovery in the housing sector slowed somewhat in recent months. Fiscal policy is restraining economic growth. Apart from fluctuations due to changes in energy prices, inflation has been running below the Committee's longer-run objective, but longer-term inflation expectations have remained stable.

Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. The Committee expects that, with appropriate policy accommodation, economic growth will pick up from its recent pace and the unemployment rate will gradually decline toward levels the Committee judges consistent with its dual mandate. The Committee sees the downside risks to the outlook for the economy and the labor market as having diminished, on net, since last fall. The Committee recognizes that inflation persistently below its 2 percent objective could pose risks to economic performance, but it anticipates that inflation will move back toward its objective over the medium term.

Taking into account the extent of federal fiscal retrenchment over the past year, the Committee sees the improvement in economic activity and labor market conditions since it began its asset purchase program as consistent with growing underlying strength in the broader economy. However, the Committee decided to await more evidence that progress will be sustained before adjusting the pace of its purchases. Accordingly, the Committee decided to continue purchasing additional agency mortgage-backed securities at a pace of $40 billion per month and longer-term Treasury securities at a pace of $45 billion per month. The Committee is maintaining its existing policy of reinvesting principal payments from its holdings of agency debt and agency mortgage-backed securities in agency mortgage-backed securities and of rolling over maturing Treasury securities at auction. Taken together, these actions should maintain downward pressure on longer-term interest rates, support mortgage markets, and help to make broader financial conditions more accommodative, which in turn should promote a stronger economic recovery and help to ensure that inflation, over time, is at the rate most consistent with the Committee's dual mandate.

The Committee will closely monitor incoming information on economic and financial developments in coming months and will continue its purchases of Treasury and agency mortgage-backed securities, and employ its other policy tools as appropriate, until the outlook for the labor market has improved substantially in a context of price stability. In judging when to moderate the pace of asset purchases, the Committee will, at its coming meetings, assess whether incoming information continues to support the Committee's expectation of ongoing improvement in labor market conditions and inflation moving back toward its longer-run objective. Asset purchases are not on a preset course, and the Committee's decisions about their pace will remain contingent on the Committee's economic outlook as well as its assessment of the likely efficacy and costs of such purchases.

To support continued progress toward maximum employment and price stability, the Committee today reaffirmed its view that a highly accommodative stance of monetary policy will remain appropriate for a considerable time after the asset purchase program ends and the economic recovery strengthens. In particular, the Committee decided to keep the target range for the federal funds rate at 0 to 1/4 percent and currently anticipates that this exceptionally low range for the federal funds rate will be appropriate at least as long as the unemployment rate remains above 6-1/2 percent, inflation between one and two years ahead is projected to be no more than a half percentage point above the Committee's 2 percent longer-run goal, and longer-term inflation expectations continue to be well anchored. In determining how long to maintain a highly accommodative stance of monetary policy, the Committee will also consider other information, including additional measures of labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial developments. When the Committee decides to begin to remove policy accommodation, it will take a balanced approach consistent with its longer-run goals of maximum employment and inflation of 2 percent.

Voting for the FOMC monetary policy action were: Ben S. Bernanke, Chairman; William C. Dudley, Vice Chairman; James Bullard; Charles L. Evans; Jerome H. Powell; Eric S. Rosengren; Jeremy C. Stein; Daniel K. Tarullo; and Janet L. Yellen. Voting against the action was Esther L. George, who was concerned that the continued high level of monetary accommodation increased the risks of future economic and financial imbalances and, over time, could cause an increase in long-term inflation expectations.